

GRAIN & FEED JOURNALS

CONSOLIDATED

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter



The New Calumet Elevator and Old Storage Annex in South Chicago
[For Description see page 387]

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS

Grain Exchange Members

Burrus Panhandle Elevators, public storage-mdsing.*
Great West Mill & Elevator Co., millers, grain dealers.*
Hardeman-King Co., grain seeds, feed mfrs.*
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain-field seeds.*
Martin-Lane Grain Co., grain and public storage
Producers Grain Corp., federal bonded warehouse
Stone, Lester, grain merchant.

BALTIMORE, MD.

Chamber of Commerce Members

Beer & Co., Inc., E. H., grain, hay, seeds.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Grain Div., recvs., shprs., consmts.*
Cargill, Incorporated, grain merchants.*
Eastern Grain Elvtr. Corp., Recvrs., shprs., elvtr. ops.*
Lewis Grain Corporation, consignments.*
McKillen, Inc., J. G., consignments.*
Provost, S. E., grain and feed broker.*
Wood Grain Corp., consignments, brokerage.*

CAIRO, ILL.

Hastings Co., Samuel, receivers and shippers.*

CEDAR RAPIDS, IOWA

Federal-North Iowa Grain Co., country run grain.*
Wildner Grain Co., grain merchants.*

CHAMPAIGN, ILL.

Sawyer & Rising, grain brokers, all markets

CHICAGO, ILL.

Board of Trade Members

Bailey & Co., E. W., grain commission merchants.*
Bennett & Co., Jas. E., grain, provisions, stocks.*
Continental Grain Co., grain merchants.*
Holt & Co., Lowell, commission, grain and seeds.*
Lamson Bros. & Co., grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.

CLEVELAND, OHIO

The Bailey Cain Co., shpr. grain, mill'd, protein feeds.*
The Cleveland Grain Co., home office.*

COLUMBUS, OHIO

Cummings & McAllister, brokers grain, feed, oil.*
Dill Grain Co., L. J., mchts.-brokers, grain, beans, feeds.

CINCINNATI, OHIO

The Early & Daniel Co., grain and feed service.*

DALLAS, TEXAS

Crouch Grain Co., J. C., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin Elevator Co., grain merchants.*
Evans Elevator Co., grain, Chicago B. of T. Members.*

*Members Grain & Feed Dealers National Assn.

DENVER, COLO.

Grain Exchange Members

The Ady & Crowe Merc. Co., whlse, grain beans, feeds.
Intermountain Elevator Co., recvrs., shprs., consignmts.*
Fred M. Smith Grain Co., consignments.

DODGE CITY, KANS.

Dodge City Term. Elvtr. Co., bonded storage-mchdrs.*

ENID, OKLA.

Board of Trade Members

Enid Elevator Corp., operating Enid Terminal Elevator*
Feuquay Grain Co., optrs., country elvtrs., gr. mdsg.*
General Grain Co., term. elvtr., gr. merchants.*
E. R. Humphrey Grain Co., grain merchants.*
Johnston Grain Co., W. B., wheat, coarse gr., fld. seeds.*
Salina Terminal Elvtr., optrs. Southwest Term. Elvtr.

FORT WORTH, TEXAS

Grain and Cotton Exchange Members

Brackett Grain Co., brokerage, consignments.*
Carter Grain Co., C. M., brokerage and consignments.*
The Ft. Worth Elvrs. & Whsg. Co., public storage.*
Lone Star Elevators, public storage-merchandising.
Rogers Co., E. M., brokerage and consignments.*
Transit Gr. & Comm. Co., mchts., storage, consgnts.*

HUTCHINSON, KAN.

Farmers Co-Operative Comm. Co., grain storage.
Smoot Grain Co., oper. Grain Belt Elevator.*

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*

KANSAS CITY, MO.

Board of Trade Members

Davis-Noland-Merrill Grain Co., grain mchts.*
The Kansas Elevator Co., mlg. wheat, corn, oats, barley.*
Meservey-O'Sullivan Grain Co., gr. mchts., consgnts.*
Mid-Continent Grain Co., gen'l grain merchants.*
Moore-Seaver Grain Co., grain receivers.*
Rahm Grain Co., J. E., cash commission merchants.*
Scouler Bishop Grain Co., consignments.*
Simonds-Shields-Theis Grain Co., grain merchants.*
Wolcott & Lincoln, Inc., consignments.*

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MEMPHIS, TENN.

Merchants Exchange Members

Buxton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange Members.

Stratton Grain Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Bunge Elevator Corp., grain merchants.*
Cargill, Incorporated, milling wheat.*
Scroggins Grain Co., grain merchants.*

OMAHA, NEBR.

Grain Exchange Members

Bell-Trimble Co., recvrs. and shippers.*
Udike Grain Corp., receivers & shippers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.*
Cole Grain Co., Geo. W., receivers and shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*

PITTSBURGH, PA.

Member Grain and Hay Exchange

Rogers & Co., Geo. E., receivers, shippers.*

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

PORTLAND, ORE.

Kerr Gifford & Co., Inc., grain merchants.

ST. JOSEPH, MO.

Grain Exchange Members

Dannen Grain & Mlg. Co., grain mchts.-consignments.*
Stratton Grain Co., grain merchants.*

ST. LOUIS, MO.

Merchants Exchange Members

Anheuser-Busch, Inc., feed grains.*
Fuller-Woodbridge Com. Co., gr. & millets, all kinds.*
Langenberg Bros. Grain Co., grain commission.*
Mullally-Evans Co., everything in grain.*
Nelson Commission Co., grain commission.*
Teasdale Comm. Co., J. H., consignments solicited.*
Terminal Grain Co., grain, soybeans, consignments.*

SALINA, KANS.

Eberhardt-Simpson Grain Co., general mchts.*
Smoot Grain Co., oper. Salina Terminal Elevator.*

SIDNEY, OHIO

E. T. Custerborder & Co., carlot grain.
Wells Co., The J. E., wholesale grain.*

SIOUX CITY, IOWA

Grain Exchange Members

Flanley Grain Co., grain merchants.*

TOLEDO, OHIO

Board of Trade Members

De Vore & Co., H. W., consignments, futures, tr. buyers.
Rice Grain Co., "Oats Specialists."*
Southworth Grain Co., consignments, futures.

TOPEKA, KANSAS

Derby Grain Co., general grain merchants.*

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., opers. Wellington Term. Elvtr.

WICHITA, KANS.

Board of Trade Members

Craig Grain Co., wheat, feed & consgnts., bonded whses.
Wichita Terminal Elvtr. Co., gen'l elvtr. business.*

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price-Current-Grain Reporter (Est. 1844). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed. 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year, 25c per copy. Entered as second class matter November 27, 1930, at the Post Office at Chicago, Ill., under the act of March 3, 1879. Vol. LXXXIV, No. 9, May 8, 1940.

Use Universal Grain Code and Reduce Your Telegraph Tolls

Board of Trade
Members**KANSAS CITY**Board of Trade
Members**SIMONDS-SHIELDS-THEIS GRAIN CO.**
GRAIN MERCHANTS

ELEVATOR CAPACITY, 4,000,000 BUSHEL

Frank A. Theis, President

F. J. FitzPatrick, Vice President

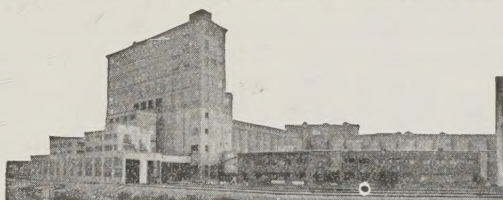
F. L. Rosenbury, Secy-Treas.

Affidavit of Weight
(Duplicating)

This form is designed for use in making sworn statements of amount of grain loaded to substantiate claims for loss of grain in transit or when dispute arises. Printed on bond paper, in black ink, size 5½x8½ inches, and bound in books of 50 blanks, perforated, and 50 duplicates, with heavy binders board bottom and hinged pressboard top, with two sheets of carbon. Order Form 7 A.W. Weight, 8 oz. Price 75c; three copies \$2.00, plus postage

Grain & Feed Journals
Consolidated

332 S. La Salle St., Chicago, Ill.

DAVIS-NOLAND-MERRILL GRAIN CO.Board of Trade
Kansas City, Mo.

Operating
SANTA FE ELEVATOR "A"
10,200,000 BUSHEL
Modern Fireproof Storage

Ask for our bids on *Wheat, Corn, Oats, Rye and Barley* for shipment to *Kansas City and the Gulf*—Special Bin Storage
Furnished at Regular Storage Rates.

Grain Exchange
Members**DENVER**Grain Exchange
Members**CIPHER CODES**

We carry the following cipher codes in stock:

Universal Grain Code, board cover...\$1.00
Robinsons Cifer Code, leather..... 2.50
Dowling's Grain Code..... 3.00
Miller's Code (1936), cloth..... 2.00
Cross Telegraphic Cipher (10th edition) 4.00
Peerless Export Grain Code.....85.00
A. B. C. Code, 5th Ed., with sup.....20.00
Baltimore, Export Cable Code.....15.00
Bentley's Complete Phrase Code....10.00

All prices are f. o. b. Chicago

GRAIN & FEED JOURNALS
Consolidated

332 S. La Salle St. Chicago, Ill.

Intermountain Elevator Companyand FORT MORGAN MILLS, INC. DENVER, COLORADO
Receivers, Shippers, and Elevator Operators**CONSIGNMENTS SOLICITED**

Ample storage, constant stocks, and country connections enable us to give prompt, efficient service, and dependable quality on coarse grains, and protein milling wheats.

There is no better time to advertise than the present. Better start before your competitor. Write the JOURNAL today.

FRED M. SMITH GRAIN CO.
Denver, Colo.

Originators and merchandisers of milling wheat and coarse grains.
200,000 bushels public storage.
Consignments Solicited.

Corn Exchange
Members**BUFFALO**Corn Exchange
Members

Wood Grain Corp.
CONSIGNMENTS—BROKERAGE
BUFFALO, N. Y.

American Elevator & Grain Division

Russell Miller Milling Company

RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS

CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality on coarse grains, durums and protein milling wheats.

**You Can Sell
Your Elevator**

by advertising directly
to people who want
to buy, by using a

Grain & Feed Journals
For Sale Ad**EASTERN GRAIN ELEVATOR CORPORATION**Receivers, Shippers, Elevator Operators
CONSIGNMENTS SOLICITED**Lewis Grain Corp.**

A good firm to consign to
Corn—Oats—Soft Wheat—Barley
BUFFALO NEW YORK

J. G. McKILLEN, INC.
RECEIVERS

Consignments a Specialty
BUFFALO NEW YORK

Board of Trade
Members**CHICAGO**Board of Trade
Members**LAMSON BROS. & CO.**

2200 Board of Trade

Established 1874

Chicago, Ill.

*"66 years of continuous service in the grain trade."*GRAIN — BEANS
STOCKS — BONDS
COTTON — BUTTER
EGGS — PROVISIONS**E. W. BAILEY & CO.**
COMMISSION MERCHANTS

GRAIN, SEEDS AND PROVISIONS

1142-44 Board of Trade, CHICAGO

JAMES E. BENNETT & CO.

ESTABLISHED 1880

332 So. La Salle St., CHICAGO, ILL.

CONSIGNMENTS AND FUTURES ORDERS SOLICITED IN ALL PRINCIPAL MARKETS

KANSAS CITY
Board of TradeST. LOUIS
Merchants ExchangePEORIA
Board of TradeCAIRO
Board of TradeINDIANAPOLIS
Board of TradeMINNEAPOLIS
Chamber of Commerce**ASK FOR BIDS**Wheat — Corn — Barley
Rye — Oats — Soy Beans**CONTINENTAL GRAIN COMPANY**332 SOUTH LA SALLE STREET, CHICAGO
PRODUCE EXCHANGE, NEW YORK**RECEIVERS — SHIPPERS — EXPORTERS**

MEMBERS OF ALL LEADING COMMODITY EXCHANGES

TERMINAL ELEVATORS

CHICAGO • ST. LOUIS • PEORIA • KANSAS CITY • OMAHA

THE QUAKER OATS COMPANY

BUYERS OF

Oats Corn Wheat BarleyCedar Rapids,
Ia.Ft. Dodge,
Ia.Akron,
OhioSt. Joseph,
Mo.

CHICAGO, ILLINOIS

**Hedging by Dealing
in Grain Futures***By G. Wright Hoffman, Ph.D.*

A subject of much interest to all handlers of grain; not a fragmentary discussion but a presentation of the subject in a comprehensive and scientific manner.

This book, bound in cloth, 141 pages, includes, besides an extensive bibliography, chapters on: The Development of Futures Trading and the Practice of Hedging; The Theory of Hedging; Limitations Affecting Hedging; The Extent of Hedging; Extension of the Principle of Hedging.

This is a valuable book and will be worth to you many times its cost.

Price \$2.00 f. o. b. Chicago

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St.

Chicago, Ill.

To BUY or SELL**RENT or LEASE
an ELEVATOR**

Place an adv. in the "Wanted" or "For Sale" columns of the GRAIN & FEED JOURNALS, of Chicago. It will bring you quick returns.

RECEIVERS, SHIPPERS AND BROKERS**E. H. BEER & CO., INC.**Successors to
Chas. England & Co., Inc.
GRAIN—HAY—SEEDS

Commission Merchants

308-310 Chamber of Commerce, Baltimore

**LANGENBERG BROS. GRAIN
COMPANY**

Established 1877

ST. LOUIS

NEW ORLEANS

Nanson Commission Co.

Grain—Hay—Seeds

202 Merchants Exchange Bldg.
ST. LOUIS, MO.

Chamber of Commerce
Members**MINNEAPOLIS**Chamber of Commerce
Members**Clark's Car Load
Grain Tables**

Eighth edition, extended to show bushels in largest carloads, shows the following range of reductions of pounds to bushels by fifty pound breaks.

20,000	to 129,950 lbs.	to bushels of 32 lbs.	
20,000	" 74,950 "	" " 34 "	
20,000	" 118,950 "	" " 48 "	
20,000	" 140,950 "	" " 56 "	
20,000	" 140,950 "	" " 60 "	

Pounds in red ink; bushels in black, 48 pages. Lined ledger paper reinforced, bound in keratol with marginal index. Weight, 8 oz.

Price \$2.50 at Chicago

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle St., Chicago

If What You Want you see
advertised, tell the advertiser.
If Not—Tell the Journal.

SATISFACTORY SERVICE IN EVERY BRANCH of the GRAIN BUSINESS

CARGILL

INCORPORATED

Minneapolis and All Principal Terminal Markets

Personal Attention Plus Experienced Supervision Given Every
Consignment.

WHEAT

AND ALL OTHER GRAINS

Any Grade—Any Quantity—Any Time

BUNGE ELEVATOR CORPORATION
MINNEAPOLIS, MINN.

WHAT DO YOU NEED

to modernize your plant so it will minimize your
labor and increase your profits? Is it here?

Account Books	Hammer Mill
Attrition Mill	Head Drive
Bag Closing Machine	Leg Backstop
Bags and Burlap	Lightning Rods
Bearings {Roller	Loading Spout
Ball	Magnetic Separator
Beltling	Manlift
Bin Thermometer	Moisture Tester
Bin Valves	Motor Control
Bleachers and Purifiers	Mustard Seed Separator
Boots	Oat Clipper
Buckets	Oat Huller
Car Liners	Plans of Grain Elevators
Car Loader	Portable Elevator
Car {Puller	Power {Oil Engine
Pusher	Motors
Car Seals	Power Shovel
Cipher Codes	Railroad Claim Books
Claim (R. R.) Collection	Rope Drive
Clover Huller	Safety Steel Sash
Coal Conveyor	Sample Envelopes
Concrete Restoration	Scales {Truck
Corn Cracker	Hopper
Conveying Machinery	{Automatic
Distributor	Scale Tickets
Dockage Tester	Scarifying Machine
Dump	Screw Conveyor
Dust Collector	Seed Treating {Machine
Dust Protector	Chemicals
Elevator Leg	Separator
Elevator Paint	Sheller
Feed Formulas	Siding-Roofing {Asbestos
Feed Ingredients	Steel or Zinc
Feed Mixer {Dry	Silent Chain Drive
Molasses	Speed Reduction Units
Feed Mill	Spouting
Fire Barrels	Storage Tanks
Fire Extinguishers	Testing Apparatus
Foundation Restoration	Transmission Machinery
Grain Cleaner	Waterproofing (Cement)
Grain Drier	Weevil Exterminator
Grain Tables	Wheat Washer

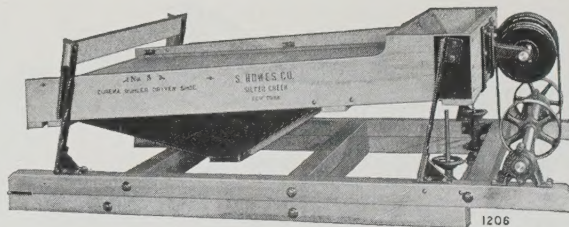
Draw a line through the supplies wanted, and write us regarding your contemplated improvements or changes. We will place you in communication with reputable firms specializing in what you need, to the end that you will receive information regarding the latest and best.

INFORMATION BUREAU

Grain & Feed Journals, 332 So. La Salle St., Chicago

'Snappy'

SCALPER, CLEANER, BOLTER, DRESSER

**Amazing Capacity**

A versatile, easy-to-install Shaker: rapidly screens trashy grain—will swiftly sift bulky, or slow moving materials your present equipment handles sluggishly and inefficiently . . . Small space, trivial power, attentionless operation . . . Hi-intensity oscillation and a unique 'reflex' jolting motion keep sieve openings clean . . . Built in several sizes.

Ask for Data J-404.

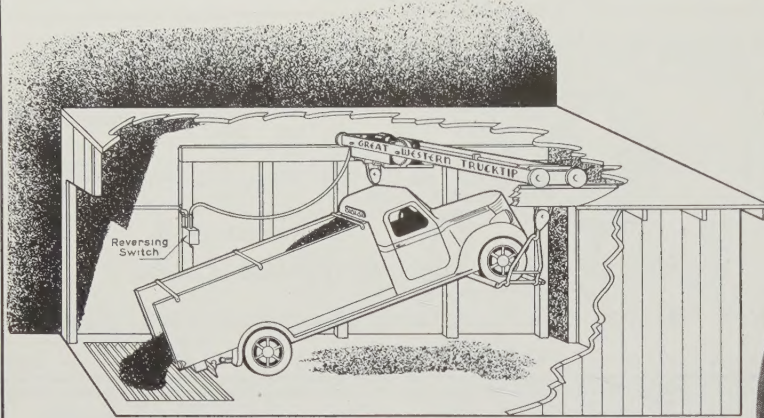
S. HOWES CO., Inc.



Silver Creek, N. Y.

Your Elevator's Wants Are Supplied in These Columns

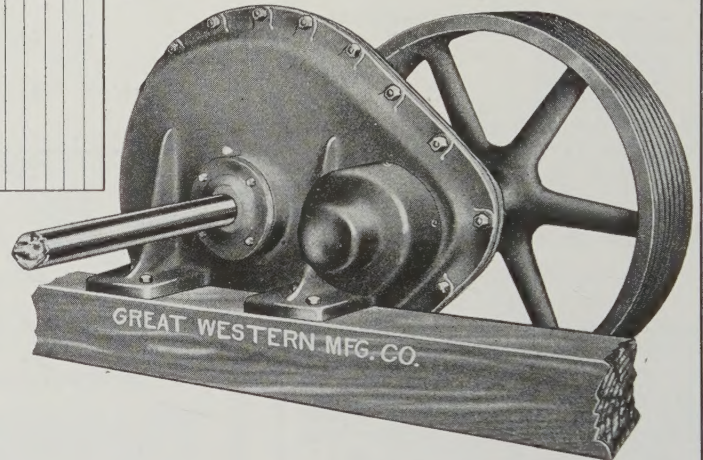
GREAT WESTERN ELEVATOR EQUIPMENT



GREAT WESTERN Trucktip

is dependable, economical and sturdy. Its operation is fast, quiet, smooth and positive. Shipped complete with totally enclosed motor mechanism, track, cradle, wire rope, reversing switch, and cable. Extremely easy to install.

We manufacture a complete line of equipment, including elevators, conveyors, mixers, spouts, power transmission, etc., and furnish supplies for grain elevators, flour and feed mills.



GREAT WESTERN Elevator Head Drive

and Backstop is a highly efficient, positive drive. It is built with cast iron housing, machined joints, ball bearings, and cut gears running in oil. Furnished with head shaft, V belt drive, and anti-friction outboard bearing.

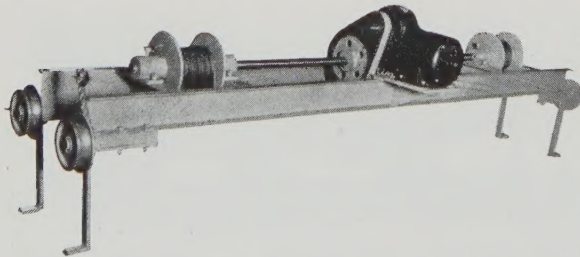
GREAT WESTERN MANUFACTURING CO.

1940 Baker Street, LEAVENWORTH, KANS.

1400 W. 12th St., KANSAS CITY, MO.

K. C. ELECTRIC OVERHEAD TRAVELING DUMP TRUCK

STURDY—COMPACT—POWERFUL



The "K.C." ELECTRIC DUMP comes to you complete with motor assembled and with either cradle or wheel hooks ready to set up.

The "K.C." ELECTRIC DUMP unit includes motor suitable for electric current characteristics available, also includes a reversing type switch and necessary brake. The reversing type switch may be operated by cable for control at the rear end or at any point in your dump house. The braking power of the unit is such that it will hold in suspension the front end of the loaded truck at any point in the vertical lift. It is made in two standard sizes and is supplied with 2 or 3 horse power gear hoist type motors respectively, complete with cable, blocks, cradle or wheel hooks and 16 feet of half oval track on each side. Cradle and wheel hooks are made suitable for any standard truck or wagon. Equipped with safety features and operates quietly and without vibration.

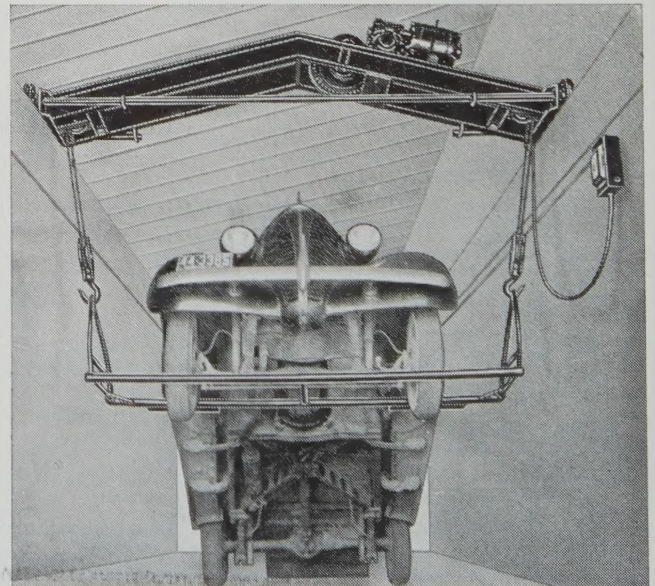
Special 10 H.P. "K.C." ELECTRIC TRAILER TRUCK DUMP units also available for Platform Lift.

WRITE FOR PRICES

GENERAL MILL EQUIPMENT CO.
ENGINEERS - MANUFACTURERS

2021-23 PENNSYLVANIA AVE. - KANSAS CITY, MO.

THE BENDER ELECTRIC LIFT



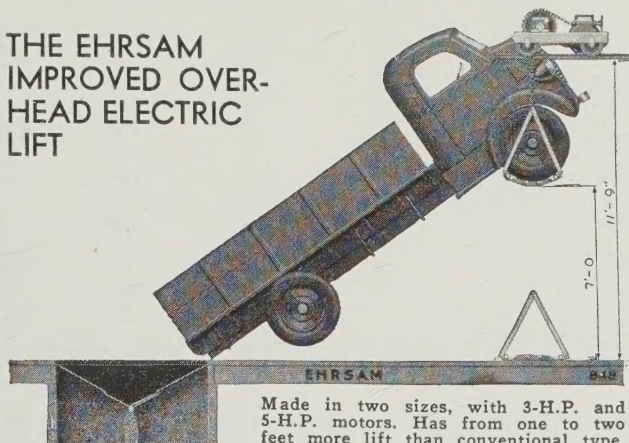
Built of electrically welded steel and fitted with a self-locking worm gear. Made to order to fit your driveway and serve any number of sinks, and will dump all size trucks. Equipped with 2, 3 or 5 h.p. Totally enclosed geared head motor. The 3 h.p. model lifts truck 5 ft. in 13 seconds. Mounting for any type driveway. Above cut shows low gable or slanting roof model. Motor unit and gears may be mounted below or above the crane.

ORDER NOW FOR IMMEDIATE SHIPMENT

BENDER HOIST MANUFACTURING COMPANY
OMAHA, NEBRASKA

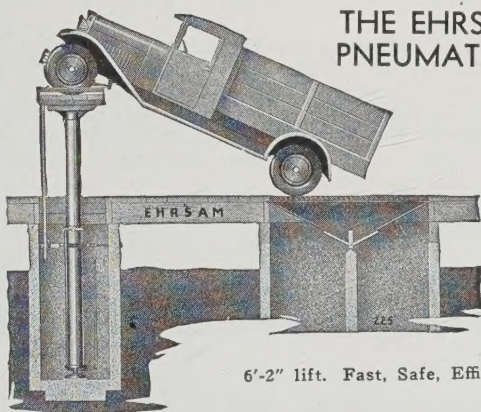
EHR SAM TRUCK LIFTS

THE EHR SAM
IMPROVED OVER-
HEAD ELECTRIC
LIFT



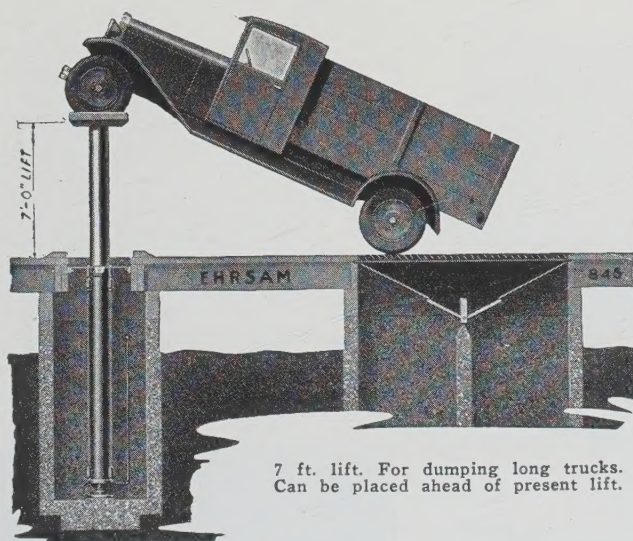
Made in two sizes, with 3-H.P. and 5-H.P. motors. Has from one to two feet more lift than conventional type.

THE EHR SAM STD.
PNEUMATIC LIFT



6'-2" lift. Fast, Safe, Efficient.

THE EHR SAM STYLE B PNEUMATIC LIFT



7 ft. lift. For dumping long trucks.
Can be placed ahead of present lift.

Write for new catalogue No. 439

THE J.B.EHR SAM & SONS MFG. CO.
ENTERPRISE, KANSAS

W. H. Kent, 549 W. Washington Blvd., Chicago
Ralph K. Albert, 902 Southland Life Bldg., Dallas



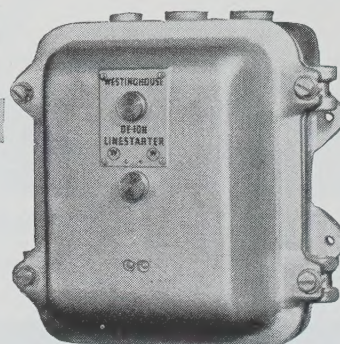
He brings you undivided responsibility

Naturally you wouldn't buy the wheels, frame and motor parts for your auto from different manufacturers and expect to get top performance. Yet you face a similar problem every time you purchase electrical equipment for your elevators or mill.

Your Westinghouse salesman can provide you with complete apparatus, from switchboards to motors . . . designed and built by one manufacturer. Backed by years of practical experience in elevator and milling methods, this equipment provides you with "matched performance" in every unit.

It will prove far more economical in the long run to consolidate your electrical purchases with Westinghouse. Our local office or agent will give you fast, capable service.

WESTINGHOUSE ELECTRIC & MFG. CO.
EAST PITTSBURGH, PA.



Tune in "Musical Americana,"
N.B.C. Blue Network, every
Thursday evening.

**WESTINGHOUSE
LINESTARTER** — Magnetic Motor Starter. Approved by the Underwriters' Laboratories, Inc., for hazardous locations where grain dust is prevalent. (Class II Group G locations.)

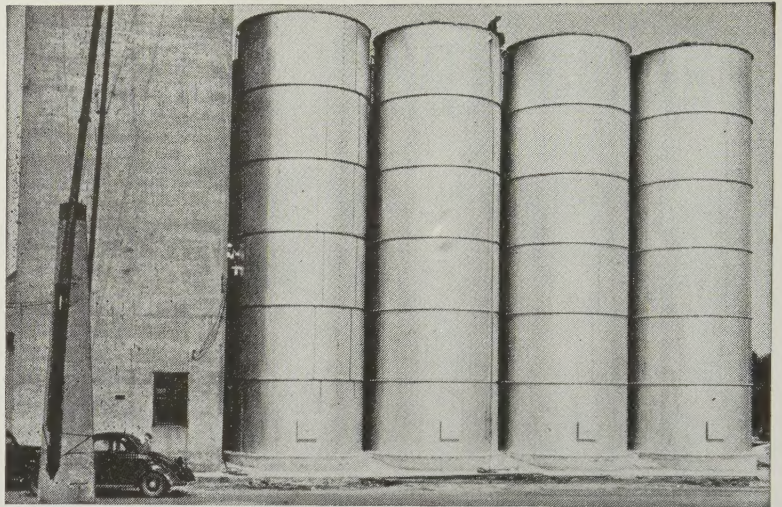
J-94295

Westinghouse
ELECTRICAL PARTNER OF INDUSTRY



MORE for Your Storage Investment

Get the extra grain storage advantages of Columbian Bolted Steel Tanks—for quick replacement and expansion or for permanent installation. This type of tank continues to grow more popular all the time for grain storage by mills and elevators. And no wonder—they are so easily installed, and are as permanent as the steel from which they are made—the best grade of hot rolled Copper-bearing steel.



COLUMBIAN BOLTED STEEL TANKS

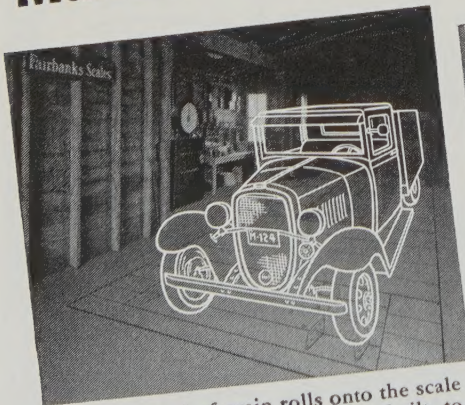
Fire-safe, weather-tight, rodent-proof. Can be increased in size—or dismantled, moved to a new location and re-assembled, without damage to tanks. Literally hundreds in use throughout the grain areas of the U. S., Mexico, Central and South Americas. Available in sizes ranging from 10 to 40 feet in diameter and up to 84 feet high.

Above is an example of how mills and elevators recognize Columbian as the outstanding builder of bolted steel storage tanks. This battery of eight was recently installed for the Pioneer Cooperative Elevator, Slater, Missouri. Whether your storage requirements are for one, two or a battery of eight or more, it will pay you to investigate Columbian Tanks before you buy any new storage facilities.

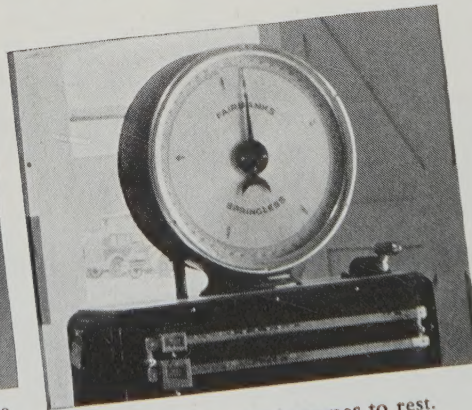
WRITE, wire or telephone for complete information, now!

COLUMBIAN STEEL TANK CO., P. O. Box M-4226, Kansas City, Missouri

FAIRBANKS GRAIN DUMP SCALE Makes FAST Work of Handling Incoming Grain . . .



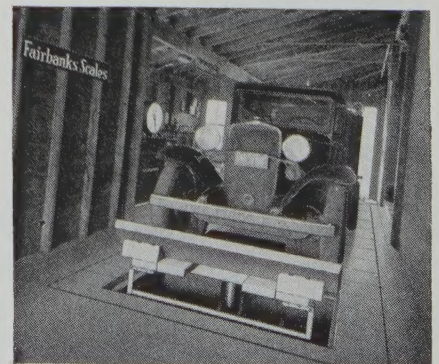
1 A truckload of grain rolls onto the scale platform. Scale mechanism is built to withstand the shocks of heavy loads.



2 Dial pointer quickly comes to rest. Easy-to-read figures show exact weight—no mental calculations.

FAIRBANKS Grain Dump Scales are designed for a large grain pit and apron to boot tank. This permits dumping from both long and short trucks. They speed up handling, eliminate the losses through weight errors—cut down handling cost. All of which adds up to a better profit for you at the end of the year. For details, write Fairbanks, Morse & Co., Department 37, 600 S. Michigan Ave., Chicago, Ill. Branches and service stations throughout the United States and Canada.

3 Air lift raises front end of truck and load of grain flows through grating in scale platform into pit below.



FAIRBANKS-MORSE

DIESEL ENGINES
PUMPS
ELECTRICAL MACHINERY
FAIRBANKS SCALES
RAILROAD EQUIPMENT

WATER SYSTEMS
WASHERS-IRONERS
FARM EQUIPMENT
STOKERS
AIR CONDITIONERS



Scales

7766-SA22.27

GUNTEX COMPOUND

for use in

GUNTEX PROCESS

supplied exclusively by

THE FLINTKOTE COMPANY

30 ROCKEFELLER PLAZA



NEW YORK, - - - NEW YORK

ATLANTA

BOSTON

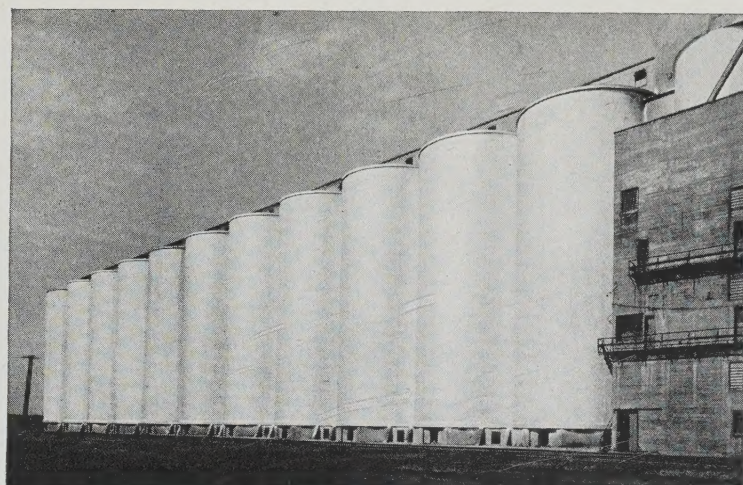
CHICAGO

DETROIT

NEW ORLEANS

WACO

LOS ANGELES



We Have Adopted the
“GUNTEX”

as the Most Effective Method
 of
 Waterproofing and Preserving
 Concrete Grain Tanks

We Make Estimates and Contract
 to
 Do the Work

Figure shows Unit 3 of 11,000,000 bushel Elevator
 at Argentine, Kas., Guntexed in 1939. Unit 4
 Guntexed in 1934 is still as good as when finished.

Jones - Hettelsater Construction Co.

Mutual Building — — Kansas City, Mo.

Designers and Builders

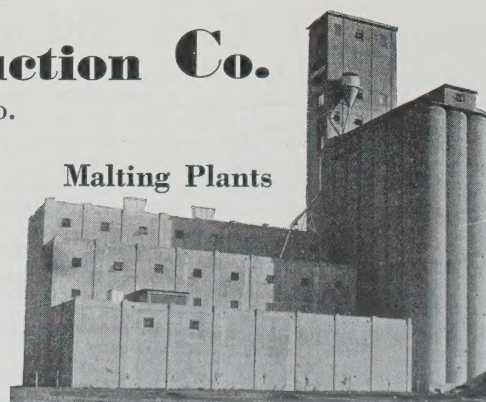
Grain Elevators

Feed and Flour Mills

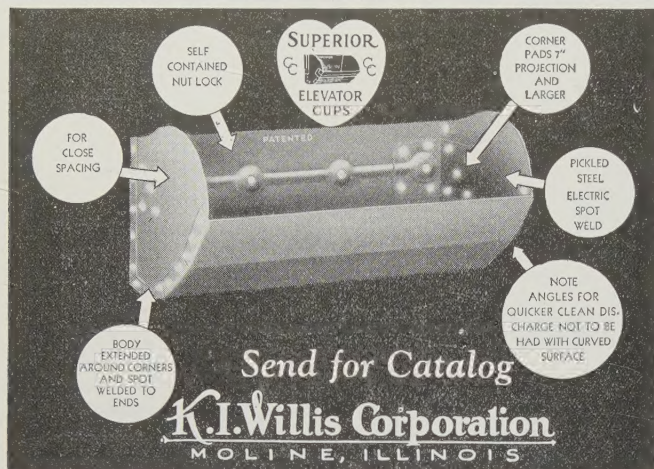
MILLER MALTING COMPANY

LOS ANGELES, CALIF.

Complete Malt Plant Including
 Elevator—Kiln House—Germinating Compartments
 Designed and constructed by us.



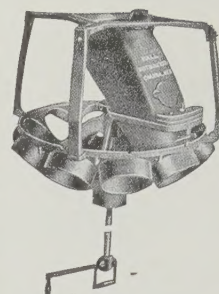
HERE IS OUR CLOSE—CC— CENTER TYPE "B" CUP



THIS "SUPERIOR" MODEL

is especially superior on very close centers. Install "CC" for larger capacities and where there's a wide range of belt speeds. Our famous DP No. 1 model is our standard cup. (Not illustrated.) Millers like it because it doesn't break grain yet scoops full. Also popular is our large-flare, special-purpose DP No. 2. And our up-to-date V cup that holds more than other cups of that design; picks up and discharges better, too.

Write to us—K. I. WILLIS CORPORATION, Moline, Illinois for names of distributors and further details.



Write for our catalog.

HALL DISTRIBUTOR COMPANY
1504 Grant St. Omaha, Nebr.

THE BUSY SEASON

of elevator building and repairing is here. Repairs are big items in maintenance of machinery. Shrewd purchasers estimate and calculate them closely.

ECONOMY OF SPACE and ECONOMY IN USE are important features.

THE HALL SIGNALING DISTRIBUTOR is a simple, efficient, durable device which accomplishes ends none others reach, as thousands of users will testify.



GRAIN & FEED DUSTS Are DANGEROUS Protect Yourself With A DUPOR Double Filter RESPIRATOR

DUPOR NO. 4 for nuisance dusts has "Original twins" filter construction! Respirator is foldable, reversible—fits any shaped face. Has approved face cloth for comfort. Weighs but 4 oz. Conversation Easy! Get the protection you need—order a Sample Respirator today!

H. S. COVER

1937 Chippewa St., South Bend, Ind.

\$1.50
SAMPLE
POSTPAID

Record of Cars Shipped

This double page form is designed especially for country shippers in keeping a complete record of each car of grain shipped from any station or to any firm. On each double page are the following column headings: Date Sold, Date Shipped, Car No., Initials, To Whom Sold, Destination, Grain, Grade Sold, Their Inspection, Discount, Amount Freight, Our Weight, Bushels, Destination Bushels, Over, Short, Price, Amount, Freight, Other Charges, Remarks.

The book is 9 1/4 x 12 inches, and contains 160 pages of ledger paper, 29 lines to each page, and has spaces for recording the foregoing facts regarding 2320 carloads. It is well bound in strong boards with karotol back and corners.

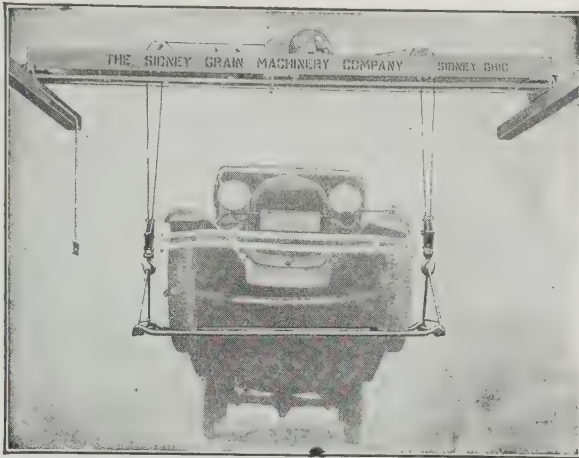
Order Form 385. Price, \$2.50.

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle St.

Chicago, Ill.





SIDNEY TRAVELING TRUCK DUMP

designed for your driveway
with
special geared motor unit and push button
control.

**STURDY
SILENT
FAST**

Send for descriptive literature.

**THE SIDNEY GRAIN MACHINERY COMPANY
SIDNEY, OHIO**

Grain Shipping Books

Record of Cars Shipped facilitates keeping a complete record of each car of grain shipped from any station, or to any firm. It has the following column headings: Date Sold, Date Shipped, Car Number, Initials, To Whom Sold, Destination, Grain, Grade Sold, Their Inspection, Discount, Amount Freight, Our Weight Bushels, Destination Bushels, Over, Short, Price, Amount Freight, Other Charges, Remarks. Book contains 80 double pages of ledger paper, size $9\frac{1}{2} \times 12$ inches, with spaces for recording 2,320 carloads. Well bound in heavy black pebble cloth with red keratol back and corners. Shipping weight, $2\frac{1}{4}$ lbs. Order Form 385. Price \$2.50, plus postage.

Sales, Shipments and Returns. Is designed to save time and prevent errors. The pages are used double; left hand pages are ruled for information regarding "Sales" and "Shipments"; right hand page for "Returns". Column headings provide spaces for complete records of each transaction, one line. Book contains 80 double pages of ledger paper, size $10\frac{1}{2} \times 16$ inches, with 8-page index. Spaces for recording 2,200 cars. Bound in heavy canvas with keratol corners. Weight, $3\frac{1}{4}$ lbs. Order Form 144A. Price \$3.35, plus postage.

Grain Shipping Ledger for keeping a complete record of 4,000 carloads. Facing pages are given to each firm to whom you ship and account is indexed. Book contains 80 double pages of ledger paper with 16-page index, size $10\frac{1}{2} \times 15\frac{1}{2}$ inches, well bound with black cloth covers and keratol back and corners. Weight, 4 lbs. Order Form 24. Price, \$3.50, plus postage.

Shippers Record Book is designed to save labor in handling grain shipping accounts and gives a complete record of each car shipped. Its 80 double pages of ledger paper, size $9\frac{1}{2} \times 12$ inches, provide spaces for 2,320 carloads. Wide columns provide for the complete record of all important facts of each shipment. Bound in heavy black cloth with keratol back and corners. Shipping weight, $2\frac{1}{4}$ lbs. Order Form 20. Price \$2.50, plus postage.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.

Without *THIS* you can't have **EFFECTIVE** *Pest Control*

Killing Weevil and Moth isn't enough! If you want to stay out of trouble, your fumigant must also *sterilize the eggs*. Unless it does *this*, you'll soon have a new crop of pests. LARVACIDE takes its toll of *egg life*, as well as of adults and larvae.

EIGHT IMPORTANT ADVANTAGES—

- (1) Easy to use; no expensive equipment needed.
- (2) Extraordinary penetration. Reaches where lighter gases may not.
- (3) Kill includes egg life.
- (4) No ill effect upon grain, after due aeration.
- (5) Kills rodents so *they die in the open*. No carcass nuisance.
- (6) Discourages rehabilitation of rodent retreats.
- (7) Cuts Accident Risk. Any good fumigant is toxic to humans, but LARVACIDE'S inseparable self-warning quality drives out all without masks, even at far below the lethal concentration.
- (8) No fire or explosion hazard.

Write for new program: Making Your Fumigation Simpler, More Economical, More Successful. It includes Terminal and Country Elevators.

Larvacide
CHLORPICRIN

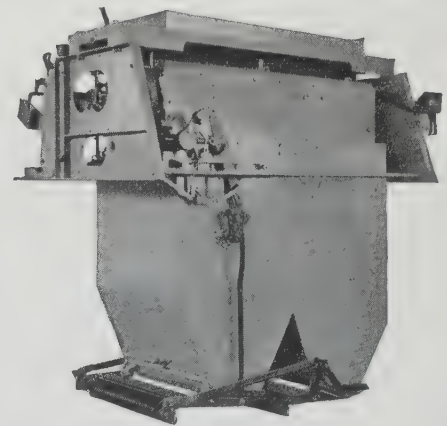
**INNIS, SPEIDEN
& COMPANY**

Established 1816

Cylinders 25 to 180 lbs. and 1 lb. Bottles,
each in metal can, 6 and 12 to wooden
case. Stocked in major cities.

117 Liberty St., NEW YORK

CHICAGO • CLEVELAND • BOSTON • PHILADELPHIA • OMAHA



**GET
PAID**

for ALL THE GRAIN YOU SHIP

You can't be sure you bill ALL you ship unless you know EXACTLY how much you load to cars or trucks. Avoid undercharges and overcharges by installing a Richardson Automatic Grain Shipping Scale.

It will give you an unquestionable printed record of each shipment—accurate to the last pound. It will even compensate itself automatically for variations in specific gravity and rate of supply. These unique, long-lived scales quickly pay for themselves in time, labor and power savings besides avoiding overweight deliveries and underweight complaints. Bulletin G42034 shows how. Write for a copy.

RICHARDSON

Chicago Minneapolis Omaha Wichita

San Francisco

RICHARDSON SCALE COMPANY, CLIFTON, N. J.

GRAIN ELEVATOR BUILDERS

HORNER & WYATT
*Engineers*Designers of Grain Elevators,
Flour Mills and Feed Mills

Consulting engineers to the milling and grain trade

470 BOARD OF TRADE KANSAS CITY, MO.

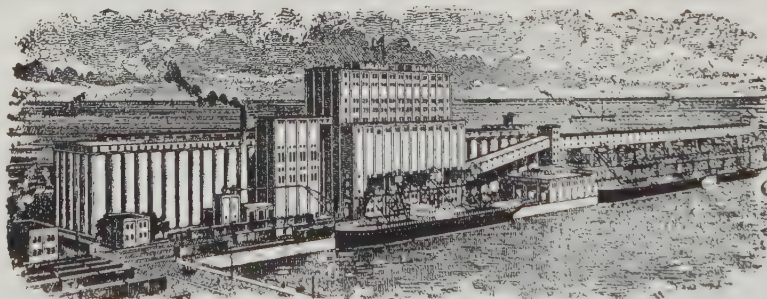
The Grain Trade'saccepted medium for "Wanted"
and "For Sale" advertisements is
the semi-monthly Grain & Feed
Journals Consolidated.**Santa Fe Elevator "A"**
Kansas City, Kans.Capacity
10,500,000 Bushels**JOHN S. METCALF CO.**
Grain Elevator Engineers and Constructors

111 W. Jackson Blvd.

460 St. Helen St., Montreal

837 W. Hastings St., Vancouver, B. C.

12-15 Dartmouth Street, London, England

Capacity
5,000,000
BushelsEquipped with
Four Stewart
Link-Belt
Grain Car
Unloaders

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

JAMES STEWART CORPORATION

ENGINEERS AND CONTRACTORS

FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

**THE CALUMET**

(Protected by U. S. & Foreign Patents)

Increased Capacity
Perfect Discharge **Superior Wearing Quality**We can also furnish these buckets in a new rustless, non-sparking metal for flour and soft feed.
Less than one quarter the weight of steel and at a fraction of the price of standard stainless steel.

We handle a complete stock of Norway Flathead Bucket Bolts and Spring Washers

B. I. WELLERSOLE OWNERS of the patent and SOLE Licensed Manufacturers
in the U. S. under this patent.

220 W. Chicago Ave., East Chicago, Ind.

327 S. La Salle Street, Chicago, Ill.

THE STRONG-SCOTT MFG. CO., LTD.
Toronto WINNIPEG Calgary
Licensed Manufacturers for the Dominion of CanadaR. R. HOWELL & CO., Minneapolis, Minn.
Northwest Distributors

GRAIN ELEVATOR BUILDERS

POLK SYSTEM CONCRETE STORAGE

POLK-GENUNG-POLK CO.
Fort Branch, Indiana
Designers — Contractors

J. H. FISCH CO.

Elevator Builders and Movers
Barnesville, Minnesota

A. F. ROBERTS

Construction Co.
Designers and Builders of
Any Type Grain Elevators
Sabetha, Kansas

A. Clemans Construction Co.

SOUTH SOLON, OHIO
Engineers — Contractors
Fireproof Modern Grain Elevators

YOUR ELEVATOR

can be brought up-to-date for less than
it is costing you to operate it. Ask for
our recommendations and estimates on
modernizing your plant.

Reliance Construction Co.
Board of Trade Indianapolis, Ind.

CONCRETE

CONSTRUCTION OF
Grain Elevators—Feed Mills—
Flour Mills—Coal Pockets

RYAN CONSTRUCTION CO.
503 Keeline Bldg. Omaha, Neb.

YOUNGLOVE CONSTRUCTION CO.

DESIGNERS AND BUILDERS OF
GRAIN ELEVATORS
Feed and Soybean Plants
Repairing
201 Grain Exchange, Sioux City, Ia.

FRIEDLINE

Designs and Builds Grain Mills,
Elevators, Warehouses
Special Machinery

Fred Friedline & Sons
Kentland, Ind.

Ibberson Efficiency — Saves Money —

Builders of: Grain Elevators
Feed Mills
Coal Plants

Repairing and Remodeling

T. E. IBBERSON CO.
Minneapolis — Minnesota

Say you saw it in the

Journal

When you write our advertisers
Thanks

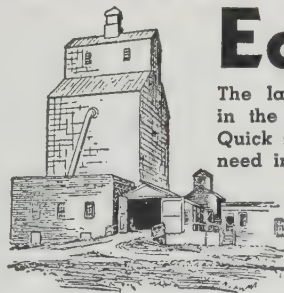
HOGENSON

Construction Co.
Designers and Builders
Elevators, Feed Mills, Warehouses
REMODELING
Corn Exchange Bldg. MINNEAPOLIS, MINN

ORA LONG MANHATTAN, KANSAS

Builder of
BETTER GRAIN ELEVATORS
Waterproof Pits and Repairing

Grain Elevator Equipment



The largest and most complete stock
in the country. Quality merchandise.
Quick shipments. No matter what you
need in the way of machinery or sup-
plies, if it is used in a grain
elevator or feed plant you can
get it from us promptly and at
prices that will save you
money.

We Manufacture:

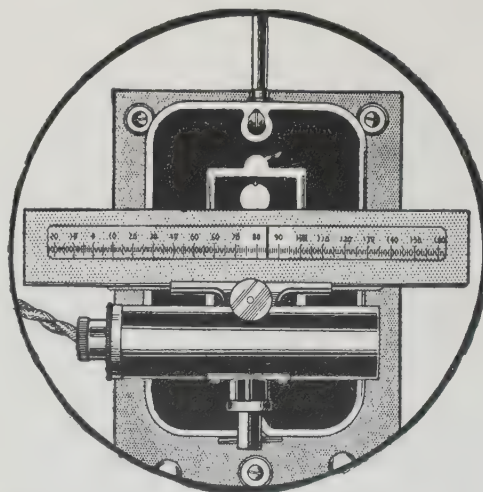
DIRECT-CONNECTED GEARED ELEVATOR HEAD DRIVES,
AERO-FLEX TELESOPING PNEUMATIC TRUCK DUMPS,
ELECTRIC OVERHEAD TRAVELING TRUCK HOISTS,
COMBINATION FEEDER, SCALPER AND MAGNETIC
SEPARATOR, PNEUMATIC FEED BLOWERS AND COL-
LECTORS, VERTI-LIFT RADIAL DISTRIBUTORS AND
SPOUTING, PULLEYS, SPROCKETS, GEARS, BEARINGS,
CLUTCHES, ETC.

We Distribute:

Attrition Mills—Hammer Mills—Batch Mixers—Molasses
Mixers—Corn Crushers—Corn Shellers—Corn Crackers
and Graders—Waukesha Power Units—Grain Cleaners—
Oat Hullers—Seed Treaters—Scales—Car Pullers—Air
Compressors—Motors—Manlifts—Conveyors—Belt-
ing—Cups—Rope—Cable—Chain—Dockage Equipment.

GENERAL CATALOG AND PRICES ON REQUEST

R. R. Howell Co.
MINNEAPOLIS, MINNESOTA



The "I's" Have It

Investigate the merits of the ZELENY SYSTEM!
Insist on ZELENY fittings in the bin floor slab!
Install a complete ZELENY THERMOMETER
SYSTEM in your elevator!

Inquiries for estimates solicited. Quotations sub-
mitted without obligation

ZELENY THERMOMETER COMPANY

542 South Dearborn Street
CHICAGO ILLINOIS

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

MICHIGAN—Grain elevator and coal business; dwelling and oil station included; good location; on private owned land. Stewart Elevator Co., Linden, Michigan.

CENTRAL ILLINOIS—Country steel and concrete elevator, 18,000 bus. capacity; air truck lift; active, heart of the corn belt; bargain. Rare opportunity. Address 84J9, Grain & Feed Journals, Chicago.

SOUTHWESTERN INDIANA—Terminal elevator, steel and concrete, capacity 135,000 bus. track scale, brick warehouse, truck facilities, plenty of ground for expansion, excellent rate and distribution point. Address 84B5, Grain & Feed Journals, Chicago.

FOR SALE—10,000 bu. cribbed elevator and equipment; coal sheds, office building and dwelling, cob and fuel house, lumber shed. Bradish, Boone County, Nebraska. For further information write to Omaha Bank for Cooperatives, Farm Credit Bldg., Omaha, Nebr.

NORTH CENTRAL, ILLINOIS—Grain elevator, metal clad feed and cement room, frame ear corn crib, general storage warehouse, manager's residence. In excellent agricultural district on IC Ry. A money making station, can be bought at small fraction of replacement value. Address 84H6, Grain & Feed Journals, Chicago.

ILLINOIS—Fully equipped frame grain elevator, gas engine power, reserve elevator fully equipped for oats or barley storage on C&NW in one of richest corn raising stations of state. Modern 6 room two story manager's home; office bldg., one story warehouse, two story modern lumber shed, salt shed; complete line of supplies handled. This station has always been a profit producer. Will be sold at bargain to settle estate. Address 84H7, Grain & Feed Journals, Chicago.

CHASE, ILL—CMSP&P. Good agricultural section; only business here; possibilities of lines of trade without limit; 110-150 cars grain annually; new modern frame grain elevator, fully equipped; new store bldg. and office; frame corn crib and ear corn elevator; feed and cement shed, frame coal shed; all bldgs. in good working condition and good physical condition; complete stock of usual sidelines; competition friendly. Must sell at once to settle estate. A. H. Holcomb, Sycamore, Ill.

ELEVATORS FOR SALE

MYRTLE, ILL.—On CGW Ry. Land rental \$30 annually; grain elevator fully equipped; warehouse; 8 room two story residence; good trade area. This is a merchandising point, very little grain handled. Excellent opportunity for all sidelines. This is a bargain, better investigate it quick. Holcomb-Dutton Lbr. Co., Sycamore, Ill.

SOUTHEASTERN INDIANA—10,000 bu. cribbed elevator for sale; good condition; truck scales, sheller, cleaner, etc.; coal yard with Godfrey conveyor, 3 large warehouses on 167 acres ground; own siding; on hard surface U. S. road. 6-room house and two-car garage in A-1 condition on 1 acre ground; in best grain and feed territory in eastern part of Ind. Inspection invited. J. H. Bell, Box 22, Cottage Grove, Ind.

FOR SALE OR LEASE

DISTILLERY building formerly occupied by Hiram Walker & Sons; four story bldg., steam heated and modern; has grain storage, cleaners, separators and grinders, copper tanks, electric motors, boilers, etc. Located in Peoria on a through street on the R. I. Ry.; excellent location for feed mill or soybean mill plant; also can be used for storehouse; will sell distillery equipment separately or together. For particulars write Peoria Grain Co., 100 Chicago St., Peoria, Illinois.

FLOUR MILL FOR SALE

SOUTH CENTRAL ILLINOIS—Splendid 400 bbl. four story brick flour mill; good transit, large fireproof warehouse, ample grain storage; large increase in soybean acreage; this crop and buildings well adapted to soybean equipment; present owners might participate in new undertaking if properly financed. Address 84G16, Grain & Feed Journals, Chicago.

BUSINESS OPPORTUNITIES

50 BBL. WATER POWER mill with coal and feed business for sale; mill residence; 16 acres and water right; on Big Four Railroad. Yeazell & Baldwin, New Moorefield, R.R. 6, Springfield, Ohio.

SOUTHWESTERN INDIANA—Long established 100 bbl. Nordike & Mormon flour mill; feed equipment, grain elevator in connection, with capacity of 1500 bus.; in heart of wheat and corn belt; two railroads, good schools in town of 2000. Address 84C7, Grain & Feed Journals, Chicago.

FOR SALE OR TRADE

CAR LOT feed business in garden spot central west doing good business. Address 84F8, Grain & Feed Journals, Chicago.

STOP! READ! THINK! One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now.

SITUATION WANTED

WANTED a job or would lease or buy small elevator; 20 years' experience grain and all sidelines. Best references. Write 1450 Park Place, Wichita, Kansas.

ELEVATOR manager wants connection; 15 years' experience, can handle lumber business if desired, excellent bookkeeper, reasonable salary. Address 84F5, Grain & Feed Journals, Chicago.

POSITION as manager of country elevator wanted; 3 years' experience under very capable manager; willing to start for reasonable wage until I prove my ability. David Izard, Fithian Grain Co., Fithian, Ill.

WANT position as manager of grain elevator on good main line railroad; 20 years experience as manager on branch line; 42 years of age; excellent references. Address 84J1, Grain & Feed Journals, Chicago.

HELP WANTED

SALESMEN—Excellent sideline; sell attractive counter display card. "Di-fast" rat killer. Write Standard Products Co., Napoleon, Ohio.

McMILLIN DUMPS

For Standard Truck, Heavy Duty & Semi-Trailer, Electrically Operated



Cut shows standard truck dump

A dump that fills all requirements. Capacity from smallest wagon to largest truck or semi-trailer. Dumps from any length vehicle into one dump door. By adding extension will dump into any number of doors. Operating connections at each door. Can be installed in almost any driveway. Installation simple and very reasonable. All parts of dump in plain view above driveway floor. Vehicles can be raised to any angle for dumping. Can be stopped and started as desired. Under complete control. All-steel power unit completely assembled. Substantially constructed. No delicate parts. **SPEEDY, SAFE and SIMPLE** in operation.

Address

L. J. McMILLIN

525 Board of Trade Bldg., Indianapolis, Indiana

A Trial Order

GRAIN & FEED JOURNALS
CONSOLIDATED

332 So. La Salle St., Chicago, Ill.

A MERGER OF
GRAIN DEALERS JOURNAL
AMERICAN ELEVATOR & GRAIN TRADE
THE GRAIN WORLD
PRICE CURRENT-GRAIN REPORTER

Gentlemen:—I wish to try the semi-monthly *Grain & Feed Journals Consolidated* to learn if I can get any helpful suggestions from the opinions, practices and experiences of other grain dealers. Enclosed please find Two Dollars for one year.

Name of Firm.....

Capacity of Elevator

Post Office.....

..... bus.

State.....

MACHINES FOR SALE

FEED MILL No. 40 Fairbanks engine 15 h.p. John Justin, Rice, Minn.

RICHARDSON scale, elevator, mixer, corn cutter; bargain. W. W. Pearson, Reynolds, Ind.

WESTERN sheller and cleaner, both in good condition. Johnston Elevator, Homer, Ill.

CORN CUTTER & Grader—has motor—used very little. 84G5, Grain & Feed Jnl's., Chicago.

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 84G7, Grain & Feed Journals, Chicago, Ill.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 84G8, Grain & Feed Journals, Chicago, Ill.

FEED GRINDER and Crusher; No. 89 Clipper Cleaner; Pulleys, Bearings and Bucket Elevators. McLaughlin, Ward & Co., Jackson, Mich.

USED shafting, sheaves, bearings, shaft pulleys, about 250 ft. 1 in. transmission rope, hemp and wire. Sibley Grain Co., Sibley, Ill.

THE WANTED-FOR SALE DEPARTMENT of GRAIN & FEED JOURNALS is a market place where buyer and seller, employer and employe, and those offering investments can meet to their mutual advantage and profit and it will pay every subscriber to give these columns a close study twice each month, because of the constantly changing variety of opportunities seeking your consideration.

COMPLETE PLANT, including No. 5 Jay Bee hammer mill, horizontal feed mixer, magnetic separator, large pit corn sheller, Union Iron Works corn and cob separator, Sidney combined sheller and cleaner, Draver feeders, steam corn dryer, dust collectors, piping, metal spouts, two-way baggers, bucket elevators, screw conveyors, shafting, bearings, pulleys, belts, sprockets and chain, electric motors from 3 to 75 h.p. This plant was recently built and never operated; will sell as whole or by piece. Anyone in need of machinery for grain or feed plant, contact me at once. Cliff Buzick, Bardstown, Kentucky.

INCREASED CAPACITIES---

A complete stock of buckets, leg belts, head pulleys, motors and head drives enables us to quote you promptly and exactly on the proper equipment to increase the elevating capacity of your elevator legs to any speed you may desire, yet keep power costs low.

Write us about your needs.
No obligation, of course.

WHITE★STAR★COMPANY

WICHITA, KANSAS

MACHINES FOR SALE

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 84G6, Grain & Feed Journals, Chicago, Ill.

FOR SALE—Rebuilt Attrition and Hammer Mills, Mixers, Corn Cutters, Engines, Motors, Etc. Weaver Sales Corp., Corn Exchange, Minneapolis, Minn.

FOR SALE—No. 2 Miracle Ace molasses mixer with 15 h.p. motor, starter, pump and motor, gauges and meter (like new); ton Anglo-American vertical mixer with 7½ h.p. motor, hardly used; 30-ft. complete elevator with 9x6 cups; No. 2 Gruendler Whirlbeater Hammermill V-belt drive and 40 h.p. motor; cyclone, 2-way valves; Tri-Rotor Carter Disc Separator; 60 h.p. Waukesha Hesselman engine; 9x24 roller mill; Cranston scourer; five 18" twin cyclones; 4 Smith reels; style "C" Howes Rec. Separator; 100 pulleys; shafting; 10-lb. Jewell flour packer; many other items. Write for list, P. O. Box 1466, Minneapolis, Minn.

MACHINES WANTED

WANT—25 or 30 h.p. single phase motor complete Busenbark Grain Co., Crawfordsville, Ind.

WANTED—Used elevator leg complete, 50 ft. high, 14x7 buckets. C. R. Acord, Box 116, Kansas, Ill.

SCALES FOR SALE

20-TON HOWE scales, 24 and 32 ft. long; also some smaller sizes. What do you need? Perhaps we have it. Dillon Scale Co., Dallas. "Since 1920."

STOP that loss now! Why continue using inaccurate scales? We manufacture all types of motor truck and warehouse scales. 30-day trial offer. 5-year guarantee. Also some good used scales. Write for details. Bonded Scale Co., Dept. GFJ, Columbus, Ohio.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. LaSalle St., Chicago, Ill.

SEEDS FOR SALE

FOR SALE—Affidavit, Atlas Sorgo, Good Color and Good Germination. Northwest Iowa Seed Co., Hawarden, Iowa.

NEW SOYBEAN—Write for pamphlet on the new McClave Soy Bean that has from 200 to 650 pods on per stalk. Yields up to 42 bu. from 15 lbs. of seed. Write M. B. Diederich, North Ridgeville, Ohio.

WHEN YOU want field or grass seed, write us, and we will put you in communication with nearby dealers, who have what you seek. The service is free. Information Buro, Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

MOTORS—GENERATORS**ELECTRICAL MACHINERY**

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service. V. M. NUSSBAUM & CO., Fort Wayne, Indiana.

MILLS, MOTORS, ENGINES—24" Monarch, 30" Sprout Waldron direct motor driven attrition mills; 100 h.p. Fairbanks-Morse oil engine; 5 K.V.A. A.C. generator direct connected to LeRoi gasoline engine. All priced to sell. Large stock **REBUILT GUARANTEED** electric motors, all types and sizes for farm, mill and elevator service. Write us on your requirements, we buy, sell, repair and exchange. Rockford Electric Equipment Co., 728 S. Wyman St., Rockford, Ill.

MOTORS-PUMPS: Guaranteed rebuilt electric motors, pumps, etc. Largest stock in Illinois, outside of Chicago. Will take your equipment in trade; also offer emergency motor repair and rewinding service. Distributors for Wagner and Peerless motors, specially adapted for farm and grain elevator application. We offer free engineering advice on your problems. Write us without obligation. New illustrated bulletin No. 23, just off the press, will be mailed on request. Rockford Power Machinery Co., 6th Ave. and 6th St., Rockford, Ill.

Some SERVICE to your ads. I sold my elevator to the first man that answered the ad. But I received a nice number of inquiries, too. Kansas Dealer.

WANTED—Machinery Salesmen

Nationally known manufacturer and jobber of grain elevator and feed plant equipment wants salesmen in Nebraska and Kansas territory. Full or part time. Exceptional opportunity for competent men. Write 84J11, Grain & Feed Journals, Chicago, Ill.

Scale Ticket Copying Book

Contains 600 original leaves and 600 duplicates of form shown herewith. Four originals and four duplicates to each leaf. Printed and perforated so outer half of sheet, containing originals, may be folded back on the duplicate, thus giving an exact reproduction of all entries on the original. Leaves are machine perforated between tickets so they may be easily removed. Printed on bond paper, check bound, size 9½x11 inches, and supplied with 6 sheets of No. 1 carbon. Order Form 73. Price, \$1.30, f. o. b. Chicago. Weight, 2½ lbs. Cash with order for twelve books earns 10% discount.

No. _____	19. _____
Load of _____	
From _____	
To _____	
Price per bu. _____	Gross _____ lbs.
Test _____	Tare _____ lbs.
Man ON—OFF _____	Net _____ lbs.
	Net _____ bu.
	_____ Weigher.

One-fourth actual size.

GRAIN & FEED JOURNALS Consolidated
332 So. La Salle St., Chicago, Ill.

Shipping Notices Duplicating

A convenient form for advising receivers of the grade, kind and weight of grain shipped.

Loaded into car—initials and number, seal numbers, at..... station on.....date; billed shipper's order notify.....; draft for \$.....; made through.....bank of..... to apply on sale of.....bushels made.....

Fifty white bond originals, machine perforated, easily removed without tearing, and 50 manila duplicates, bound in heavy pressboard, hinged covers, with two sheets of carbon. Size, 5½x8½ inches. Weight, 8 ounces. Order Form 3 SN. Single copy, 75c; three copies, \$2.00, f. o. b. Chicago.

GRAIN & FEED JOURNALS

Consolidated
332 S. La Salle St. Chicago, Ill.

PEORIA

Located in the very center of Illinois' great corn and oats producing territory, Peoria has several of the largest corn consuming industries in the United States, including corn products, mixed feeds, and distillery products. This market also has favorable freight rates to the Gulf and Southeastern territory, which gives the Peoria grain merchants unlimited facilities for grain distribution.

So great is the demand, that Iowa and Missouri find their best market here at times and large quantities of corn move to this great Gateway from these states. Owing to the comparatively short haul to Peoria, railroads move this Peoria grain in much shorter time than to other terminals, insuring quicker returns.

*These Peoria Board of Trade Members
Want to Serve You*

Allied Mills, Inc.
James E. Bennett & Co.
Geo. W. Cole Grain Co.
Continental Grain Company
W. W. Dewey & Sons
C. H. Feltman Grain Co.

Lowell Hoit & Co.
Lamson Bros. & Co.
Luke Grain Co.
P. B. & C. C. Miles
Mueller Grain Co.
Norris Grain Co.

Hiram Walker & Sons Grain Corporation, Limited
Younge Grain Co.

GRAIN & FEED JOURNALS

CONSOLIDATED
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

**AMERICAN ELEVATOR &
GRAIN TRADE**
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., MAY 8, 1940

A GLANCE at our department Patents Granted shows that our beneficent system of rewarding private enterprise is continuing to stimulate inventors to devise improved methods of grain handling.

WAR OR no war, the grain dealers of this Western country are going ahead with improvements to their grain handling plants, as evidenced by the many reports of new construction and repairs in our Grain Trade News columns this number.

FEED MIXING and manufacture at country stations must have a real economic advantage when one of our large terminal feed manufacturers chooses to equip one of its many country elevators with complete machinery to make poultry, cattle and hog feed, utilizing locally grown grains and roughage. Contributing to this decentralization is the Wage and Hour Act exempting establishments having few employees from the heavy burdens imposed on big center enterprises.

GRAIN DEALERS who are heavy users of the telephone can cut down their expense materially by having at their elbow the automatic alarm described elsewhere that gives notice that the three minutes allowed will soon expire.

LOUVER BOARDS set close together in cupola windows can be depended upon to keep out rain and sleet, if pitched to the outside, yet will promote ventilation, and if covered with heavy wire screen of half inch mesh will keep out sparrows, pigeons, stones and locomotive sparks.

DOUBTERS that sufficient moisture has fallen to give the Northwest a splendid crop prospect should look at the quotations for September wheat at Minneapolis compared with Chicago. Now Minneapolis is 2 cents under Chicago, while one year and two years ago it was 4 to 8 cents over.

INVENTORS of patent grain doors for railway cars have become discouraged and have quit trying for a patent. The hundreds of doors invented did not stand up under the severe conditions of service and pinch-bar attack by receiving shed laborers educated to use forcible means to remove doors.

VETOING the cotton crop insurance bill was a praiseworthy recognition by the president that there was no actuarial data to warrant the experiment. The same could be said of several other laws that were not vetoed, and which serve only to prevent employers from giving private employment to thousands on relief.

EXPLOSIONS of grain dust have damaged or destroyed so many elevator cupolas, track sheds and marine legs, observing designers are now making extensive use of glazed areas and building walls of corrugated iron or other light material so as to reduce the possible damage and expedite the replacement of these structures.

SO MANY marked improvements have been made in modern manlifts that the continued use of old, worn out, out-of-date passenger elevators is inexcusable. Elevator operators who are still limping or struggling along with a cane or crutches bear warning evidence against the continued use of any elevator other than the safest obtainable.

ROOMY CONCRETE basements when well lighted are so easy to keep clean, even rats and mice are afraid to remain because their capture by the elevator cat is an easy task. Then, too, plenty of head room encourages the elevator workmen to clean out the spills when made and thus reduce the attractiveness of the basement for weevil and other grain infesting insects.

INTERSTATE seed trade is entering a new era under the Federal Seed Act; but the dissemination of noxious weeds will not be stopped until the states take action to check farmers trading unclean seeds across the fence.

A PROFITABLE HOBBY for the grain dealer retailing poultry feeds is a demonstration in his show window or on the farm of what his feeds will do for the buyer producing poultry or eggs. Ocular evidence of desirable results are the most convincing.

NO EMPLOYEE in good health develops disease by breathing dust, however uncomfortable it may be to work in a dusty atmosphere; but to protect themselves from overly sympathetic state compensation commissions and the complaisant courts employers may find it advisable to have workers examined periodically for bronchial disease, and to give those affected employment where dust-free surroundings are available.

THE CORN SUBSIDY under discussion by officials of the Department of Agriculture will encounter an unfavorable reaction from our cattle feeding industry, if the effect is to give feeders in Argentina and Canada cheaper corn in the international market, while feeders in the United States pay a higher price in a vain attempt to compete with feeders in those countries shipping live cattle and meat products into the United States.

GRAIN SHIPPERS continue to attend grading schools in such numbers as to convince all inspection authorities that the majority of country shippers are more interested than ever in knowing the grade of the grain they ship as well as its market value. Their interest in realizing more profitable returns from their shipments is further supported by their installation of improved grain cleaning machines which not only remove much of the dirt and foreign matter, but so thoroughly mix grain to be shipped as to remove all suspicion of plugging.

"RETAIL SALES" need a re-definition under the wage and hour act to prevent a retailer from being classed as a wholesaler as interpreted by the Washington bureaucracy. The administration seems to have been driven by the vague wording of the law to drag in the functions of the employer, when the law specifically states that, being a law for the employee, its application is determined strictly by what the worker is doing and not what the employer is doing. If an article once crosses a state line the administration is attempting to follow that article with control to ultimate point of consumption, disregarding the fact that the final action of the employee was a retail sale.

Elevator Men Expect and Are Preparing for Better Business

The many improvement items in our news columns give convincing proof of grain dealers' full recognition of the advantages of rehabilitating and modernizing their grain handling facilities. The long drawn out depression has exercised such a discouraging influence on elevator operators that many have persisted in serving their patrons with obsolete equipment. Elevator owners recognized the folly of attempting to serve their patrons satisfactorily with old machinery that rendered fair service in the days when most of the grain arrived in wagons.

While the drouth has materially reduced the acreage devoted to the growing of winter wheat, oats and barley which are free from governmental meddling will more than make up the deficiency in the southwest so that alert grain merchants will welcome the arrival of new crop grain with rejuvenated plants equipped with larger and more dependable truck scales, faster and more efficient dumps, legs, head drives and distributors.

Elevator owners who have given any consideration to the well known fire hazards of their plants have learned to their great profit that the fire insurance credits for reducing fire hazards make it most profitable for them to displace all wood shingles and siding with iron, to equip their plants with standard lightning protection and to reduce their bills for power, oil and labor by installing anti-friction bearings. The mutual fire insurance companies specializing in grain elevator risks give such liberal credits for correcting known fire hazards that these improvements affect such a saving in the cost of insurance that the cost of improvements is soon wiped out and henceforth the improvements earn a perpetual credit in the form of reduced premiums.

Advancing market prices have resulted in moving most of the wheat and some of the corn held off the market by government loans, so it seems certain that elevator operators will handle a greater volume of grain the first six months of the 1940-41 crop year than has been their pleasure for several years past.

Improved highways have encouraged the use of larger and larger trucks in hauling all grain to market and the use of combines and machine corn pickers has expedited the loading of these trucks so that it has become necessary for the grain buyer to equip his plant for the rapid handling of a larger volume every day. The provision of modern rapid handling machinery not only expedites the receiving and shipping of grain, but it reduces the interest charge on operating capital as well as the expense of manual labor needed.

Not only are elevator operators re-

habilitating their grain handling facilities, but many are improving their feed grinding equipment, thereby insuring more satisfactory results for patrons, attracting more business by being in a position to satisfy the most exacting demands of finicky feeders and attracting much new business through their ability to render better service and produce more profitable returns.

No progressive grain dealer enjoys operating an obsolete plant and all are disposed to modernize their grain handling facilities as well as their salesroom so many grain offices are now well lighted and heated, extending a pleasing welcome to all patrons who drop in. Business transactions are no longer delayed by a long drawn out game of checkers or poker. The up-to-date grain office is on the job every minute and alert dealers are taking advantage of every facility to impress visitors with their preparation to serve them.

The elevator man's venture into sidelines has made him a retail merchant without interfering with his wholesale buying operations, and the dealers who are best equipped to serve their farmer patrons in both activities are sure to profit liberally for their enterprise.

Grain Crops Bound to Be Improved

Indiana crop improvement committees have recently selected seventy-three different farms for conducting tests with the most promising varieties of oat seed obtainable in hope of learning what variety offers the greatest resistance to smut and rust. Similar tests with wheat are being conducted by state improvement associations throughout the wheat growing territory and with most gratifying results.

Grain dealers everywhere fully recognize that satisfactory yields cannot be obtained unless greater vigilance is exercised in the selection and treating of seed grain best adapted to different soils and climate.

Grain dealers and millers are giving much merited assistance to all of these crop improvement activities to the great advantage of their farm patrons.

DRIVERS of grain laden trucks with defective brakes must be kept off the wagon dump to avoid damage as occurred at Nassau, Minn., recently when a truck rolled off the pneumatic dump.

IT SHOULD be gratifying to feed manufacturers that sales of mixed feeds are not only gaining year by year in Ohio and other states, but that the sales of the mixed feeds are gaining faster than sales of unmixed feeds. From 1937 to 1939 in Ohio the increase in mixed feeds sold was 50,000 tons, against 22,000 tons for the unmixed, reflecting a healthy appreciation by feeders of the superiority of the product.

Curb the Bureaucrats

The most cheering item of news that has come out of Washington for many a day is that the Walter bill to deprive the bureaucrat of the power of judge, jury and executioner, all in one, is in line for enactment.

Most citizens do not realize the extent of this bureaucratic control, each businessman thinking he is the only class oppressed. The grain merchant does not know that the manufacturer is harassed. In fact, the Walter bill applies to 120 boards and federal agencies, several large bodies such as the Interstate Commerce Commission being let alone.

The bureaucratic method is to appoint an "examiner" or a "referee" to collect evidence, follow this up by having a cheap law clerk cull the findings to be passed on up to the chief of the Bureau who promulgates his decision without having read the evidence.

Before this bill passes the senate it might be well to strengthen the provision depriving the bureaucrat of power to be sole judge of the facts, and the sufficiency of the evidence.

Unfair Trucker Competition

A truck is an inanimate object and can no more be charged with crime than the operation of hauling by truck.

The use of trucks in the grain business is not reprehensible, when employed by a regular grain dealer such as the Wolfe Grain Co., to make good the deprivation of rail service at Athens, Mich., as described in last number.

In asking legislation to curb the irresponsible itinerant too much emphasis can be laid upon the vehicle used by the crooks, when the real need is enforcement of laws against fraud. Such enforcement is facilitated when the fly-by-nights are required to register and possess a license, enabling their victims to catch up with them.

The established grain dealer who is assessed on his real estate and taxed on his personal property pays for the protection of his enterprise, and in addition pays taxes for the up-keep of schools, and worthy public undertakings having no direct beneficial effect on his business. This contribution he must extract from his business, and if his business is undermined by a trucker who contributes nothing to these public activities he may be forced out of business and there will be no one to support the county, township, city or village by taxation, what license the trucker pays, if any, going to the state.

Thus, instead of a heavy license fee, simply acting as a brake on the trucker, legislation might profitably take the form of an occupational tax commensurate with that paid by the established dealer, to place both on a competitive level for the benefit of the local community.

The New Calumet Elevator in South Chicago

One year ago an explosion of grain dust and the resultant fire, destroyed Calumet Elevators A, B, C in South Chicago, and two elevators on the opposite side of the slip, all of wood construction. The reinforced concrete annex of Elevator "A," with capacity of 1,000,000 bushels suffered considerable damage, to the walls on the south side, the cupola and the elevating and conveying machinery, altho little or no damage was suffered by the grain in store.

Arrangements were made promptly to rehabilitate the Annex and to build a new elevator on the site of the old "A" house. Repairs to the Annex were completed together with temporary facilities for the receipt and shipment of grain by August first.

The new elevator consists of a working house, storage annex, marine tower, drier building, car dumper shed, truck dump, office building and switchboard room.

THE WORKING HOUSE, of reinforced concrete throughout, is 79x34 ft. 6 inches by 195 ft. 7 inches high. The pent house for receiving leg head and drive is 11 ft. 2 inches. The work house contains three elevator legs each of 2500 bus. hourly capacity, two legs of 10,000 bus. capacity each, four 3000 bushel garners over four Fairbanks type S hopper scales each of 2500 bus. capacity.

In the basement are four 36 inch conveyor belts carrying grain from the storage bins to boots of legs and to two 36 inch cross conveyors.

The first floor of the workhouse has a large area of steel grating to help ventilate the basement.

The bins of the workhouse are cut across the middle to provide a separate story for the cleaning machines leaving a number of small bins above the cleaner story for untreated grain and an equal number of small bins below for cleaned grain. In the cleaner story are three separators and two clippers of modern design.

In the first story of cupola are three 42 inch belt conveyors which carry grain to the bins of the new storage and a 42 inch reversible belt conveyor connecting cupola of work house with cupola of old annex.

In the scale story is a commodious office for the deputy weighmen. Each of the scale four hoppers, four garners and all leg heads are vented to the outside atmosphere. Helical speed reducers transmit power to the head pulleys of all legs.

Two car loading spouts convey grain from the shipping scales to cars on one of the tracks between the working house and the old annex.

A modern passenger elevator provides easy passage between work floor and scale floor of workhouse. A flight of steel stairs at west end of the workhouse is enclosed from basement to the top floor, while the stairs affording passage between the floors of the cupola at the opposite end of cupola are not enclosed.

AN IMPROVED DUST collecting system keeps the dust under control throughout the new elevator and the old storage annex. Suction connections are applied to all boots, receiving, shipping and transfer belt loaders and discharges, as well as turnheads and some bins receiving grain direct from scales. Aspiration is also provided at the car dumper hopper. Floor sweeps are provided throughout all working areas. Windows throughout the plant are large and provide ample ventilation. All dust collected is spouted direct to a steel dust tank of one and one-half car load capacity installed beside the shipping tracks and from it a pneumatic loading equipment carries the dust into box cars.

A steel stair fire escape with exits from each floor is attached to the waterside wall of the workhouse.

THE MARINE TOWER is of structural steel covered with corrugated iron. Its floors are formed of steel plates. The building houses a crosshead type of leg of 15,000 bus. hourly capacity together with hoist, pusher and four cleanup shovels.

THE CAR DUMPER Shed, which is 93 ft. from the working house, is of structural steel covered with corrugated iron. An improved Link Belt car dumper like all other machines and machinery in the elevator is operated by electric power. Dust is removed by an individual fan system. A 42 inch con-

veyor belt carries the grain into the working house.

The Link-Belt patented grain car unloader consists of a structural steel cradle, so mounted on rollers at four points as to permit endwise tipping to 40 degrees from the horizontal in either direction, and of a car supporting platform, pivotally mounted to permit side-wise tipping to an angle of 15 degrees in one direction. The combined effect of tipping a car of grain sidewise 15 degrees and endwise 40 degrees in either direction (with the grain door removed on the dumping side) causes the entire contents of the car to be discharged through the car door opening into the large steel hopper supported from the foundation.

The main cradle is supported on four forged steel rollers, arranged and is rotated by one-inch diameter steel cable driven from two large winding drums. The drums are rotated by a 30 H.P. crane and hoist type fully enclosed slip ring motor, a Herringbone Reducer and a pair of cut steel spur gears running in oil in an oil tight housing. A solenoid brake on the motor holds the cradle in any desired position.

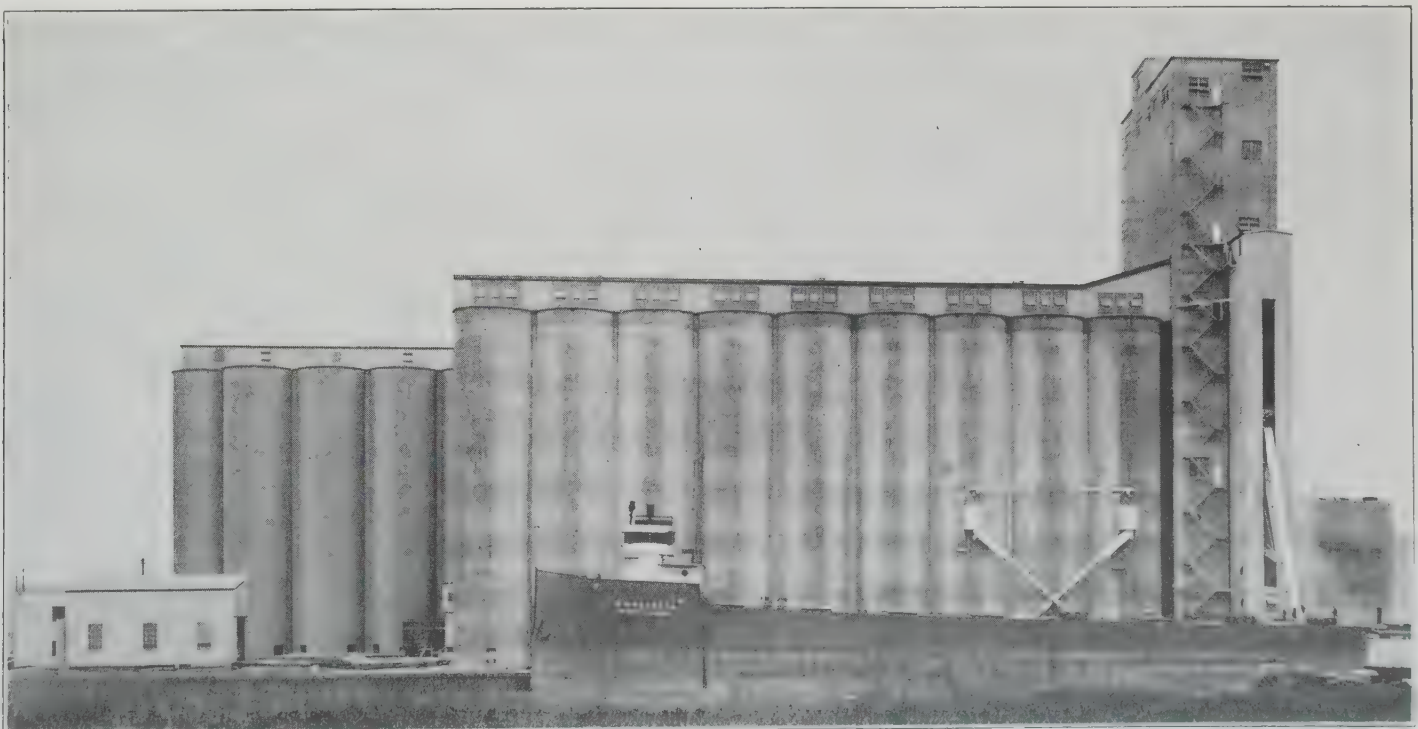
The car supporting platform is pivotally mounted on the main cradle, and arranged to be tipped sidewise to an angle of 15 degrees, through a train of cut steel spur gears running in oil in an oil tight cast iron housing and driven from an 11 H.P. squirrel cage motor. A solenoid brake on the motor holds the platform in any position when the current is off.

The car is clamped, and held against endwise movement, by two steel carriages which engage the car couplers and positively center the car on the unloader. The carriages are moved and held by steel screws, and arranged to disappear into pits at the ends of the machine. The screws move the carriages laterally by means of threaded sleeves, which in turn are driven through cut steel spur gearing from a 15 H.P. squirrel cage motor.

The door engaging frame is brought into contact with the grain door by means of the hand wheel, and is automatically locked in this position against backward movement. The car is then tipped laterally against the frame and as the grain door is held against movement, the nails are pulled free from their fastening because of the lateral movement of the car in pulling away from the door.

The door is held by spikes on the door end-

[Concluded on page 400]



The 2,500,000 bus. Reinforced Concrete Elevator of the C. & O. R.R. in South Chicago.
[See outside front cover]

Asked—Answered

[Readers desiring trade information should send query for free publication here. The experience of brother dealers is most helpful. Replies to queries are solicited.]

Taxation of Government Corn

Grain & Feed Journals: I read an article last winter that stated that the government corn stored in these steel bins and also in elevators was subject to local taxes. I would like to have more information regarding this, so we can give it to our local assessor.—R. C. Mathis, Rock River Lumber & Grain Co., Prophetstown, Ill.

Ans.: The stories of last winter related to corn or wheat that was under loan to the farmers in Kansas. The farmers supposed that, having decided in their own minds to let the government take the wheat in default they would not have to pay taxes on the grain in elevators or bins. Altho held as security for the loan the grain was not yet government property and was assessable against the farmer as the actual owner, in fact.

Corn in steel bins owned by the Commodity Credit Corporation is considered exempt from taxation as property of a government agency. Grain in elevators owned by the C.C.C. also is considered exempt. If transfer of title to the government did not take place until after the tax year had expired the farmer pays the personal property assessment, for the year past.

Dust Not Harmful to Health?

Grain & Feed Journals: As reported in the Journal, page 337 of Apr. 24 number, Arnold Kersenbrock has brought an unjustified suit against us for \$25,000 damages for alleged injury by dust; and, noting the comment that "so far the courts have not found that grain dust is harmful to a healthy individual," we ask for reference to some particular case supporting this contention, to aid our defense.—A. L. Johnson, pres. Crete Mills, Crete, Neb.

Ans.: In *Edward D. Jones v. Meridian Grain & Elevator Co.*, the Supreme Court of Mississippi on Sept. 28, 1936, decided in favor of defendant elevator company, as reported in 169 Southern Reporter, page 771, and in the Grain Dealers Journal, Aug. 11, 1937.

Jones worked in the feed plant 10 years and developed chronic bronchitis, diabetes, high blood pressure and hardening of the arteries, claimed by him to have been caused by breathing dust.

Evidence was that the dust was no more than usual in grain handling plants, and six doctors agreed in informing the court that organic dust of the character in defendant's plant was harmless to those working in it, that much of it was expelled from the respiratory system by coughing and that not expelled was absorbed and passed out of the system.

Responsibility for Tramp Iron?

Grain & Feed Journals: We understand there have been several suits decided in favor of feeders who were able to prove that their animals died because of eating tramp wire or metal in the feed they purchased.

Suppose that a farmer was to bring in a load of grist to be ground, and the grain he brought contained some tramp metal that found its way thru the hammer mill, and eventually into the stomach of one of his animals, and caused the death of such animal.

Would the fact that the grain belonged to the farmer in the first start, and that the elevator operator served only in the capacity of a custom grinder, protect the elevator operator from suit? Would the elevator operator have any claim against the farmer for any damage caused to his mill by such tramp iron? —Lon Vincent, Farmers Grain & Supply Co., Golden City, Mo.

Ans.: No decisions have been rendered by the courts on identical facts, where a farmer had his own grist ground.

The custom grinder would not be held responsible for tramp iron that the customer placed in the feed before or after grinding.

In the absence of a prior guaranty by the

farmer that his grist contained no tramp iron the custom grinder would have to assume the risk, and could not enforce a claim against the farmer for damage to his mill, the farmer's defense being that the miller was presumed to have magnetic or other separators to protect his grinding machinery.

Program Oklahoma Dealers

The Oklahoma Grain and Feed Dealers Ass'n will hold its annual convention at the Youngblood Hotel, Enid, Okla., May 15 and 16.

Speakers who will deliver addresses are:

Ray B. Bowden, St. Louis, Mo., executive vice pres. of the Grain and Feed Dealers National Ass'n;

D. I. Johnston, a prominent attorney of Oklahoma City;

Fred T. Dines, of Stillwater, managing director of the Oklahoma Wheat Improvement Ass'n;

A. W. Erickson, Minneapolis, Minn., crop investigator, and

Wm. McArthur, Washington, D. C., of the A.A.A., who is well informed on the purposes and plans of the Administration.

The annual banquet will be held the evening of May 15 at 6:30 p. m., with Ray Bowden as master of ceremonies.

Thursday morning round table discussions will be held on matters of importance to the trade, including crop reports and the government program.

A film will be exhibited showing various phases of dust explosions in terminal and country elevators.

Kansas Dealers Have Strong Program

The 43d annual convention of the Kansas Grain, Feed & Seed Dealers Ass'n will be held in the Elks Club at Salina, Kan., May 21 and 22. Leading topics are:

"Crop Insurance and Crop Loan Program," Wm. McArthur, chief commodity loan and crop insurance section of the A.A.A.

"The New Federal Seed Law," Roy A. Edwards, Kansas City, Mo., pres. American Seed Trade Ass'n.

"Putting Punch into Feed Sales," Dr. H. H. Havner, Chicago, Ill.

"Nutritive Value of Grain Products," Dr. Peterson, of the chemical laboratory of Kansas State Agri. College, Manhattan.

"Dust Explosions and How They Occur," with sound movie film, T. C. Manning, Kansas City, director, Society of Grain Elevator Superintendents.

"What Wheat Improvement Has Accomplished for Geary County," T. F. Hogan, Junction City, Kan.

"Following Grain Trade Rules," Ray B. Bowden, executive vice pres. Grain & Feed Dealers National Ass'n, St. Louis, Mo., and Washington, D. C.

"Licensing Warehouses," Scott S. Bateman, state warehouse examiner, Kansas State Grain Inspection and Weighing Dept., Kansas City, Mo.

General discussion of trade problems will take place at an important period of the convention, so reserved.

"Members of the Salina Board of Trade will give the visiting men a real treat with a picnic dinner and lots of entertainment out at the Grainmen's Cabin; while their wives are planning to royally entertain the visiting ladies," says Sec'y J. F. Moyer, who adds:

"On the evening of the 21st, the annual banquet will be held in the new enlarged air-conditioned dining room of the Lamer Hotel, where only the best of Kansas products are served; in fact, they are so exacting that they

serve only the left ham of pigs, claiming that the right ham is less tender due to the pigs' scratching with the right foot. We are not quite ready to announce the speakers and entertainment that will be yours following the banquet, but we can assure you that we have some surprises awaiting you."

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same occupation. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

May 13, 14. Panhandle Grain Dealers Ass'n, Amarillo, Tex. Headquarters, Herring Hotel.

May 15, 16. Oklahoma Grain & Feed Dealers Ass'n, Youngblood Hotel, Enid, Okla.

May 21, 22. Kansas Grain, Feed and Seed Dealers Ass'n, Salina, Kan.

May 23. Grain, Feed and Millers Ass'n of Missouri, Hoxsey and Ben Bolt Hotels, Mexico, Mo.

May 23, 24. American Feed Manufacturers Ass'n. French Lick Springs Hotel, French Lick, Ind.

May 24. Oregon Feed Dealers Ass'n, Multnomah Hotel, Portland, Ore.

May 27, 28. The Nebraska Grain Dealers & Managers Ass'n, Fontenelle Hotel, Omaha, Neb.

May 27, 28, 29. Pacific States Seedmen's Ass'n, St. Catherine Hotel, Santa Catalina Island.

June 3, 4. Central Retail Feed Ass'n. Schroeder Hotel, Milwaukee, Wis.

June 4. Northwest Country Elvtr Ass'n, Minneapolis, Minn.

June 7. Pacific Northwest Grain Dealers Ass'n, Pendleton, Ore.

June 16, 17, 18. Ohio Grain, Mill & Feed Dealers Ass'n, Neil House, Columbus, O.

June 19, 20, 21. Southern Seedsmen's Ass'n, Jefferson Davis Hotel, Montgomery, Ala.

June 20. Pennsylvania Millers & Feed Dealers Ass'n, Harrisburg, Pa.

June 21. Illinois Seed Dealers Ass'n, Urbana, Ill.

June 24, 25, 26, 27. American Seed Trade Ass'n, Palmer House, Chicago, Ill.

Aug. 15, 16. New York State Hay & Grain Dealers Ass'n, Syracuse, N. Y.

Sept. 26, 27, 28. Pennsylvania Millers & Feed Dealers Ass'n, Atlantic City, N. J.

Oct. 14, 15. Grain & Feed Dealers National Ass'n, 44th annual, Brown Hotel, Louisville, Ky.

Nebraska Dealers to Meet at Omaha

The Nebraska Grain Dealers and Managers Ass'n will meet at the Fontenelle Hotel, Omaha, Neb., Monday and Tuesday, May 27 and 28.

President E. H. Sexauer of the Grain and Feed Dealers National Ass'n will deliver an address Monday afternoon.

Sec'y Le Dioyt of the Nebraska Grain Improvement Ass'n will speak; and, altho the program is incomplete, arrangements are being made for an official in charge of enforcement work under the itinerant trucker law, and representatives of the U. S. Department of Agriculture at Washington, and of the Nebraska Department of Agriculture to deliver addresses.

When loan corn is found to be going out of condition farmers are to be asked to authorize the C.C.C. to handle it at once, according to some county committeemen, and when so handled the responsibility of the farmer for quality is to cease.

National Association Activities

Louisville, Ky.—Dealers who attend the annual meeting of the Grain and Feed Dealers National Ass'n here on October 14-15 will see something out of the ordinary—a real Kentucky Horse Show.

Rees Dickson, chairman of the host committee, announced this week that a Horse Show will be held at the Rock Creek Riding Club on the afternoon of Monday, Oct. 14, with the grain and feed dealers, and their wives, as guests of honor. Transportation will be provided from the Brown Hotel, convention headquarters, to the riding club.

"You are going to be pleased with this entertainment," Mr. Dickson writes to President E. H. Sexauer of the National Ass'n. "Our plans for the convention entertainment are working out nicely and every one here is much interested."

St. Louis, Mo.—Paul F. Scheunemann of Minneapolis has been named chairman of the Trucking Competition Committee of the Grain & Feed Dealers National Ass'n, by President E. H. Sexauer. Mr. Scheunemann has been a member of the committee for some years and as chairman succeeds Chester L. Weekes, who left the grain business this past winter.

St. Louis, Mo.—William McArthur, special field representative of the AAA, will attend a series of grain and feed dealers' conventions in the Southwest in May, according to word sent to the office here of the Grain and Feed Dealers National Ass'n, by state association secretaries.

Mr. McArthur is one of the best informed men in AAA on the ever-normal granary program, and is always open to a question-and-answer session to give the latest possible information to the dealers. He will probably have many questions to answer about the new grain storage contract, just completed by three government agencies and offered to the elevator trade.

Brookings, S. Dak. E. H. Sexauer, president of the Grain & Feed Dealers National

Ass'n, has been invited to confer in Chicago on May 10 with officers of the Millers National Federation. Mr. Sexauer, with officials of the National Grain Trade Council and with many men prominent in the grain trade, will join the millers in a discussion of common trade problems. Much of the conference, it is expected, will center around the new grain storage contract just offered from government agencies.

St. Louis, Mo.—Ron Kennedy, assistant secretary of the Grain and Feed Dealers National Ass'n, since last October, and secretary since the death of E. G. Kiburtz in early February, has resigned to take another position. His successor is not yet named by the National Ass'n.

Missouri Dealers to Meet at Mexico

A profitable and enjoyable time is offered all attending the convention of the Missouri Grain, Feed and Millers Ass'n at the thriving city of Mexico, Mo.

Sec'y A. H. Meinershagen of Higginsville promises the best convention in the history of the Ass'n, May 23, at the Hoxsey and Ben Bolt Hotels.

Speakers on the program are:

"Why Do Gypsies Get the Grain," Frank Stoll, executive director Associated Producers and Distributors, Kansas City, Mo.

"The Federal Seed Act and Its Application to the Missouri Seed Trade," Tom R. Douglass, administrative assistant State Department of Agriculture, Jefferson City, Mo.

"Responsibility of the Farmer and the Elevator Man in Achieving the Objectives of the Ever-Normal Granary," Wm. McArthur, chief commodity loan and crop insurance section of the A.A.A., Washington, D. C.

"Following Grain Trade Rules," Ray B. Bowden, St. Louis, Mo., executive vice pres. Grain & Feed Dealers National Ass'n.

"The Feed Dealer v. The Poultry Farmer," C. T. Patterson, master farmer of Missouri, and former director Missouri State Poultry Experiment Station.

"Missouri," Carl E. Bolte, pres. Missouri State Chamber of Commerce, Slater, Mo.

At 4:15 the visitors will view a formal battalion parade at the Missouri Military Academy, to which transportation will be provided by the Mexico Civic Club.

Ladies are cordially invited to the banquet at 7 p. m. in the Gold Room of the hotel. They will have luncheon at the Jefferson tea room, followed by a bridge party.

Entertainment for the evening banquet will be furnished by the St. Louis Merchants Exchange.

W. O. Brackett Chosen at Ft. Worth

W. O. Brackett, who is highly esteemed by grain dealers of the Southwest, has been honored by election to the office of president of the Fort Worth Grain & Cotton Exchange.

A believer in organized effort, he joined the Texas Grain Dealers Ass'n in 1898 when he started in business at Sherman. He went to Kansas City in 1908 and remained there until 1924, when he went to Fort Worth to go with the Fort Worth Elevators.

Since 1928 Mr. Brackett has been in business on his own account handling consignments, mill orders and brokerage.

He became a member of the Kansas City Board of Trade in 1916 and one of his sons, John C. Brackett, who learned the grain business in his office there, is a member of the Kansas City Board, where he has operated on his own account for the past eight years.

Construction Hints

By F. P. EMMERSON

RECENTLY a farmer drove his large truck heavily laden with wheat into the Farmers Elevator at Emerald, Nebr., but after he had dumped his heavy load the strong springs of the truck raised his canopy so much he could not drive out without taking top of doorway with him. A full load of heavy fat men helped to depress truck and release it from the trap. Evidently driveway exits must be provided with higher doorways or a limit be placed on the height of trucks admitted.

* * * *

DISTRIBUTING SPOUTS which can not be depended upon to deliver grain into the bin desired cost more to operate than the purchase price of the best distributor obtainable. A distributor which mixes grain even only occasionally is an expensive nuisance and should be discarded.

* * * *

THE MOVEMENT of every new crop of grain to market discloses weak foundations and crumbling walls that should have been strengthened long before harvest, and at one-tenth the cost of making repairs after the collapse. As needed improvements can be made now without interfering with the handling of grain, why procrastinate?

* * * *

LEAKPROOF water barrels filled with non-freezing calcium chloride solution and buckets do not cost much, but when the elevator starts to burn any efficient fire fighting equipment is worth a thousand times its original cost. The installation of the best fire fighting apparatus obtainable soon earns a credit on the fire insurance premium that returns the original cost and annual dividends thereafter. More profitable investments are scarce and hard to find.

* * * *

THE REMARKABLE SUCCESS of protecting grain elevators from lightning is encouraging many other elevator owners to effect a further reduction of the fire hazards of their property by installing lightning rods. The American Lightning Rod Company of Lincoln, Nebraska, is now installing rods that will protect more than fifty elevators from this hazard. The summer thunder storms always help to swell the fire losses traceable direct to lightning. The credit on the fire insurance premium soon exceeds the first cost of standard equipment.

* * * *

ANTI-FRICTION bearings not only reduce the labor of safe elevator operation, but reduce the amount of lubricants and power needed and relieve operators of worry about friction fires.

* * * *

EVERY GRAIN dealer has the right to use any old worn out steelyard for determining the weight of grain he buys or sells, but if he has an earnest desire to determine the true weight of his purchases or sales, he will equip his plant with the most reliable scales of the latest design and then keep them in condition to obtain accurate weights every time.

* * * *

MODERN AIR COMPRESSORS are so inexpensive and of such helpful design, no elevator operator who recognizes the advantage of keeping his motors clean will think of doing without the best the market affords, thus keeping motors free from dust, reducing the fire hazard and prolonging the life of the motors. No motor can be expected to give satisfactory service unless user keeps it clean and well lubricated.



W. O. Brackett, Fort Worth, Tex.
Pres.-Elect Grain & Cotton Exchange

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Burr Oak, Kan., May 2.—Condition of oats and barley, 50%; no spring wheat or rye. Winter wheat, 25%; 60% of last year's acreage.—Burr Oak Mill.

Blue Springs, Mo., May 1.—Acreage about normal with satisfactory growth and very little if any plowed up. No wheat in farmers hands.—Park Grain Co.

Benedict, Neb., May 2.—The acreage of wheat is 25% less; oats the same. We have top soil moisture at present but no subsoil. The growing condition is 85%. Small grain late.—Farmers Grain Ass'n.

Bloomfield, Ky., Apr. 19.—Soft winter wheat average: crop, 10% plowed under; looking good; 10% on farms. There is a slight increase in corn acreage; about 30% on farms.—D. B. Sutherland & Sons.

Bushland, Tex., Apr. 25.—About the same acreage planted in grain here as last year; the freeze did considerable damage to the early wheat. Don't believe there is over 10% wheat in the farmer's hands.—Hill Bros. Elevator.

Burrton, Kan., May 1.—Counting 100% as normal, wheat, barley and oats are fully up to normal. Hardly, if any, corn has been planted. We need warmer weather for pastures and corn.—D. T. Davis, mgr., Halstead Mill & Elvtr. Co.

Concordia, Mo., Apr. 23.—Condition of wheat 90%, looking good, plenty of moisture; oats coming fine; corn is being planted now; acreage on all crops about the same as last year.—George A. Klingenberg, George A. Klingenberg Elvtr. Co.

Durant, Okla., May 3.—Wheat acreage compared with last year, 70%; condition, 70%; oats, acreage, 60%, condition, 65%; corn, acreage, 1.10%, condition, 75% (late). No grain plowed up. No wheat and oats in farmer's hand; 5% corn.—Stewart Grain Co.

Atkinson, Neb., Apr. 18.—The acreage on rye is the same as a year ago, and condition is fine. Oat acreage about the same; barley acreage is increased about 20%. Too early to tell on other plantings. We have just received 1.15 inches of moisture.—J. F. Brady Co.

Decatur, Ill., Apr. 27.—Oats are up showing good stands. Spring rains the last few weeks have brought relief to pastures which were late. Clover especially is much behind the normal stage. Farmers are well along with spring work.—Baldwin Elevator Co.

Dalhart, Tex., May 5.—Wheat acreage, 50% less than last year; condition, 25%; barley, 100% more than last year, condition, 65%; oats, 25% less than last year, condition, 65%. Most all acreage lost as above will be planted to grain sorghums. Very little grain left in farmers' hands.—Schuhart Grain Co.

Dalhart, Tex., May 2.—Wheat acreage in this section is about 25% of last year owing to fall drouth. Condition about 60% of normal on wheat which came up and is growing. Subsoil moisture good surface moisture getting scarce. No good rains during April. No wheat in farmers' hands. More barley sown than usual by perhaps 40%. Some barley looking good—some poor. Most wheat land sown to wheat which will not be harvested will be summer fallowed.—Mayfield Feed & Grain Co.

Chicago, Ill., May 3.—The winter wheat crop now promises 440,000,000 bus., with possible remaining acres for harvest about 33,000,000. Regarding acres to be left for harvest, there is somewhat over 3,000,000 acres in the Southwest that are still uncertain as to whether part or all will remain for harvest, or part or all will be abandoned. Corn is backward in growth through some of the early planting sections of the south. Soil preparations are now going on in many sections throughout the main belt where the ideal planting dates range from May 10-20. Good rains have relieved a whole lot of the submoisture shortage. Nevertheless, this shortage is still dangerous in some important acreage sections. A substantial increase over last season is expected to be planted to hybrid.—H. C. Donovan, statistician, Thomson & McKinnon.

Chicago, Ill., May 3.—Our present estimate of prospect is 453 million bushels, which is a material improvement over the prospect last fall of approximately 400 million bushels. Of the planted acreage, 45,014,000 acres, it is now estimated that 12,120,000 acres, or 26.9 per cent will not be harvested, leaving 32,894,000 acres for harvest. The May 1 condition of the growing plant is estimated to be 73.5 per cent of normal which compares with 79 a year ago, and 77 the ten year average.—Nat C. Murray, statistician, Jackson & Curtis.

Ames, Ia., Apr. 29.—Iowa farmers intend to reduce their 1940 corn acreage and will partially offset this reduction by another increase in soybean acreage, report agricultural economists at Iowa State College. Partly as a result of the 12 per cent cut in 1940 corn allotments by the AAA, the soybean acreage for the country as a whole is expected to take an upturn. During March farmers indicated that they would plant 10.6 million acres. Iowa is expected to have an acreage increase of 29 per cent.

Kansas City, Mo., Apr. 24.—Timely moisture has been received over the entire state, tho heavier in the eastern half and while subsoil deficiency has not yet been overcome, the top soil has sufficient moisture in most of the state to furnish good top growth as soon as the ground warms and growing starts. As the season progresses it becomes more and more a crop, dependent on favorable weather in all sections. We maintain our previous estimate, a 76,205,000-bushel crop for Kansas, and express the opinion that favorable weather is most important.—H. L. Robinson, K. B. Latto, Robinson Elevator Co.

Springfield, Ill., May 1.—Subsoil moisture is still deficient over many areas of the north and in places in the central division. Winter wheat made mostly fair to good progress, though the cool weather retarded a desirable rate of growth; however, some fields are thin or yellow; it is mostly stooling well. The best wheat is to be found in areas of the southwest-central portions of the State where some counties show very good or excellent condition. The crop is mostly three to six inches high, and some in the south has a growth of 8 to 12 inches. Oats are practically all sown, and about 70% are up in the north and more than 80% in the south. Because of the cool weather growth has been slow. Alfalfa and clover are mostly in good condition, and pastures are mostly short or only fair; these crops likewise reflect the effect of the extended period of cool weather. Plowing for corn planting was generally active during the week, except that it was too wet in places in the southern division. Plowing and preparing ground for soybeans also was carried on to some extent.—E. W. Holcomb, Statistician U. S. Dept. of Agr.

Winchester, Ind., Apr. 27.—Wish to reiterate what I have said before, wheat is just a perfect crop and pessimistic farmers I have talked to in the past few days say they can't see anything wrong with it. This cool, wet weather has been ideal for stooling, wheat is very short, yet the ground is covered until you don't see it any place. Oats sowing is practically over and even the early sown oats are coming along making a good stand. Everything we hear from clover seed sown on the wheat and oats is that it is coming along, there has been no freeze since it sprouted and it looks good.—Goodrich Bros. Co., P. E. Goodrich, Pres.

Minneapolis, Minn., Apr. 24.—Soil moisture conditions, both surface and subsoil, are improving in practically all sections of the country, as a result of the melting snows and the light to heavy rains that have fallen during the past month. Farmers are becoming more optimistic over the prospects for spring sown grains and are preparing to put in as large an acreage as possible of spring wheat, oats, barley and flax. The cold and backward spring may have a tendency to further reduce the corn acreage. Sorghums will be used extensively in Kansas, Nebraska and in South Dakota where corn has not done so well the past few years. The soybean acreage is also on the increase.—Cargill Crop Bulletin.

Minneapolis, Minn., Apr. 24.—Delayed by snow, rain, and unseasonably low temperatures, spring work has been slow in getting under way in the Northwest. In some sections of southern Minnesota and South Dakota, wheat seeding has been finished and farmers are now busy sowing coarse grains, while in many northern districts it will require several days of warm dry weather before the ground can be worked. There has been a marked improvement in moisture conditions during the past month. Well distributed spring rains have not only supplied sufficient moisture to start the crop but in some districts have replenished reserves which had been seriously depleted by lack of fall rains.—Paul C. Rutherford, Van Dusen, Harrington Co.

Topeka, Kan., Apr. 29.—Compared with last fall soil moisture depth was greater this spring on wheat land in the western third of Kansas and less in the central third except in the south central area, according to a recent survey made co-operatively by the Kansas State Board of Agriculture and the U. S. Department of Agriculture. Soil moisture depth for land in wheat in the southwestern area was about double that of last fall, averaging 27.6 inches this spring compared with 13.9 inches last October. The southcentral counties, with an average depth of soil moisture at 42.0 inches for wheat land this spring, showed an increase of 32 per cent from the average depth of 31.8 inches last fall.—Samuel J. Gilbert, Kansas State Board of Agr.

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye, barley and soybeans for July delivery at the following markets for the past two weeks have been as follows:

	Option		Wheat													
	High	Low	Apr. 24	Apr. 25	Apr. 26	Apr. 27	Apr. 29	Apr. 30	May 1	May 2	May 3	May 4	May 5	May 6	May 7	
Chicago	111½	77½	108¾	108	106½	106¾	107½	106¾	104½	104½	105½	105½	105½	104½	103½	
Winnipeg*	93½	76½	92½	92½	90¾	91	91½	90½	90	90¾	91	90¾	90¾	90¾	90	
Kansas City	106½	72½	104	103½	101½	102	102½	101¾	99¾	99¾	101¾	100¾	99¾	98¾	98¾	
Minneapolis	107½	80½	105½	104½	103½	103½	104½	105¾	102	102¾	103¾	103¾	102¾	102¾	102	
Duluth, durum	99½	79¾	90¾	90¾	88½	89½	89¾	88¾	87½	88½	89¾	89¾	89¾	89½	89	
Milwaukee	111½	92¾	108¾	108	106¾	107	107½	106¾	104½	104½	105¾	105¾	104¾	104¾	....
			Corn													
Chicago	66¾	52¼	65¾	65	64¼	65¼	66	65¾	64¾	64¾	65¼	66¼	65¾	65¾	65½	
Kansas City	66½	49½	65½	64¾	63¾	64¾	65¼	64½	63¾	64¾	66¼	65¾	64¾	64¾	64¾	
Milwaukee	66½	54½	65¾	65¾	64¾	65¼	66	65¾	64¾	64¾	65¼	66¼	65¾	65¾	....
			Oats													
Chicago	39	30¼	37¾	37¾	37¾	38	37¾	37¼	36¾	37¼	37¾	37½	37½	37½	37½	
Winnipeg*	40½	32	38	37¾	36¾	37½	37	36¾	36	36¾	37½	37	36¾	36¼	36¼	
Minneapolis	37	31	36¼	35¾	35¾	36¼	36¾	36¾	35¾	35¾	36	35¾	35¾	35¾	35¼	
Milwaukee	38¾	33½	38	37¾	37¾	38	37¾	37¼	36¾	37½	37¾	37½	37½	37½	....
			Rye													
Chicago	76	52¼	73¼	72½	70	70½	70¼	69½	67½	68	69¼	68½	67	66½	66½	
Minneapolis	71¾	48¾	68½	67	65¾	65¾	66¼	65	63¾	64¼	65¼	63¾	63¼	62¾	62¾	
Winnipeg*	81½	57¾	71¼	70½	65¾	67¾	69½	68¾	67¾	68¾	71	70¾	69¾	68¾	68¾	
			Barley													
Minneapolis	45½	41	45½	44¾	43¾	43¾	44¼	44¼	44¼	44	44	44	43¾	43¾	43¾	
Winnipeg*	53¾	44	51¾	51¾	50¾	50¾	50¾	50	49½	49½	50	49¾	48¾	48	48	
			Soybeans													
Chicago	129½	89½	107½	106¾	106	106¼	107½	107	106	106½	107½	106¾	106	105½	105½	
*Canada Exchange	...	...	842	847	848	847	851	848	847	847	843	842	837	832	832

Haven, Kan., May 3.—The wheat crop at present looks fine, with plenty of moisture.—The Farmers Co-operative Grain Co.

Bethany, Mo., May 2.—Wheat condition, 95%; acreage, 75%. None plowed up; 3% in farmers' hands. Oats, condition, 85%; acreage, 85%.—Bethany Mill & Elevator Co., W. T. Lingle.

Lockwood, Mo., May 4.—Wheat is looking fine, fully equal to last year on this date. Acreage is about 15% smaller, this reduction having been planted to clover and other soil conservation crops.—J. R. McNeill, mgr., Farmers Exchange.

Haviland, Kan., May 4.—Ninety per cent of all wheat that was seeded has been listed up and listed to corn, maize and other row crops; one-half of the remainder has been put to oats and barley. Kiowa County will not have half enough seed to seed its own acreage.—Brenham Merc. Co. (Route 2).

Toronto, Ont., Apr. 30.—Fall wheat has come through the winter in all parts of Ontario in exceptionally good condition. The gradual breakup this spring, with a minimum amount of frost has supplied plenty of surface soil moisture for spring seeding operations in most counties.—S. H. H. Symons, statistician, Ontario Dept. of Agr.

Sidney, O., May 4.—Farmers are busy with spring work, being ten days to two weeks late. Oats sowing is just being completed. Wheat looks very good but the growth is short. There has been plenty of moisture, so warm weather, which is long past due, should bring this forward rapidly.—J. C. Custenborder, E. T. Custenborder & Co.

Burdett, Kan., May 2.—Ninety per cent of our wheat will be plowed up, leaving 10%, mostly irrigated, which is showing good. A large percentage of abandoned acreage will go to row crop, kafirs, milos, and some corn. The wheat on farms is too small to estimate. No other grains on hand.—Albert H. Martin, mgr., Farmers Co-op. Grain & Supply Co.

Spokane, Wash., May 3.—Prospects for a bumper crop of wheat in the Palouse Country appear excellent. Winter wheat in the area between Spokane and the Snake River is between seven and eight inches and 1½ ft. high and is spotty in places. Crop prospects for winter wheat are considered good. In the

Walla Walla area south of the Snake, winter wheat appears to be in the best condition in several years.—F. K. H.

Dodge City, Kan., May 2.—Oats and barley, of which there was a large acreage seeded, are looking good, and with from 20 to 30 inches of moisture in the subsoil we have every reason to believe that these grains should come thru with satisfactory yields. A large acreage of row crops, mostly grain sorghums, will be planted on the abandoned wheat acreage under favorable conditions.—J. F. Moyer, sec'y Kansas Grain, Feed & Seed Dealers Ass'n.

Caney, Kan., May 3.—Wheat acreage, 90%; condition 100% since rains and spring weather came. Oats acreage 110%; condition, 90%—weather has been too cold and are not doing as they should, also green bugs are working on oats. Corn and soybean acreage will be increased slightly. Plenty of top soil moisture for the present but subsoil not so good. No wheat will be plowed up. Generally conditions are slightly below normal.—L. J. Pearsall.

Winnipeg, Man., May 3.—Seeding is well advanced in the southern and south-eastern parts of Saskatchewan. Moisture conditions are somewhat better than last year, but continuous rains will be needed throughout the season to maintain the crop. Seeding in south-western Saskatchewan is barely started. Wet cold weather has delayed operations over most of this area. Moisture reserves seem to be much better than most other reports would indicate. Our observers report a very satisfactory depth of moisture over most of this area. A rare treat after the experiences of the past.—McCabe Bros. Grain Co., Ltd.

Minneapolis, Minn., May 4.—Quite general rains were received over the Northwest, averaging one to two inches of precipitation. This delayed flax seeding operations in northern Minnesota, northern North Dakota and Montana but farmers are jubilant over the splendid condition of the soil. Harvesting in southern California is progressing satisfactorily and the San Joaquin Valley crop is rapidly approaching maturity and harvesting is expected to start around the middle of May. There is a small amount of Texas new crop flaxseed being offered but production in that state will be very light due to very unfavorable growing conditions. Iowa confirms

again that there has been quite an increase in acreage seeded to flaxseed in the northern part of that state.—Archer-Daniels-Midland Co.

Chicago, Ill., May 1.—The May first forecasted yield per acre of winter wheat for harvest is 12.8 bus. compared with 14.9 bus. last year, 14.5 the 1928-37 average. The condition of winter wheat is 63.0 per cent compared with 64.0 in April, 79.0 in May last year and 76.0 the May, 1928-37, average. The estimate is based on an abandonment of 25.1 per cent, leaving 33,736,000 acres for harvest, compared with average 1929-38 abandonment of 17.5 per cent and 39,453,000 acres for harvest. Last year abandonment was 18.5 per cent and 37,802,000 acres were harvested. The largest acreage of barley and grain sorghums in many years were planted or expected to be planted from Nebraska and Colorado to Texas as a result of the most generally favorable May first moisture in the upper two feet of soil for eight years and following an early heaviest abandonment of wheat for the period. Much of the barley was set back over the entire Southwest in April by one or two heavy freezes. Rye production is forecast at 30,800,000 bushels on 3,250,000 acres, a rough estimate of the portion of the 5,640,000 planted acreage that is expected to be harvested for grain. Rye condition is 67.0 per cent of normal.—R. O. Cromwell, statistician, Lamson Bros. & Co.

The Flaxseed Crop

Minneapolis, Minn., April 27.—Well, Spring is still "just around the corner." The Northwest received fairly general rains the first part of this week and since then temperatures have ranged from around freezing to in the 50's. This has permitted flaxseed planting operations to progress rapidly and seeding operations in Iowa, South Dakota and the southern half of Minnesota will be completed within another week or so and in North Dakota and northern Minnesota in about three weeks. Minnesota could use some further precipitation very nicely but it would be preferable if the weather for the next week or two remained generally clear, to be followed then by moisture.

California flax crops have ripened in the Imperial Valley and actual harvesting has started with the first receipts arriving in Los Angeles April 25. This is the earliest harvest they have ever had—yields are expected to average 18 to 20 bushels per acre. Growing conditions this year have been good except in the San Joaquin Valley where there are reports of damage from mold and rust due to excess moisture.

Reports on the flaxseed crop in Texas continue bad, with boll worms destroying the flaxseed in spite of the dusting of the plants with poison from airplanes.

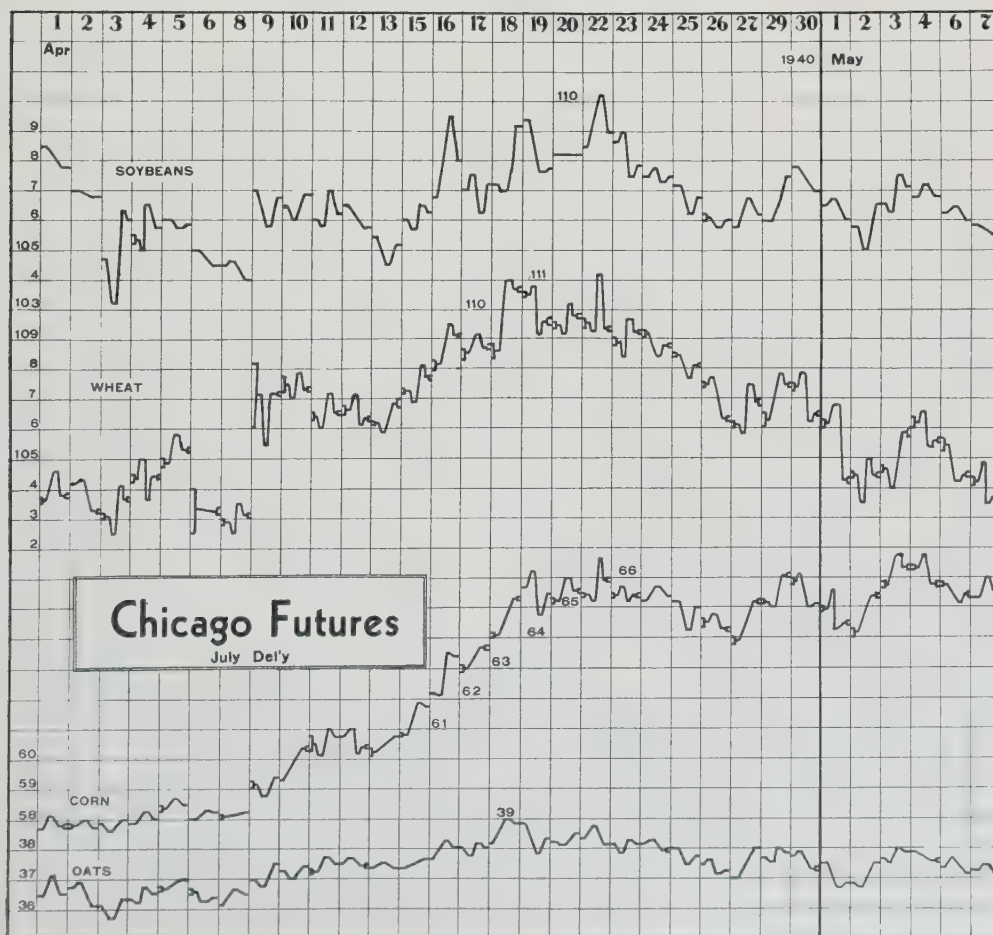
Kansas reports damage from some heavy rains washing out the young plants. The somewhat late season in the Northwest will have a tendency to increase the acreage to go into flaxseed at the expense of wheat.

Montana has been receiving excellent precipitation which—if it continues for the rest of this month—will set a new record for April rainfall for Montana.—Archer-Daniels-Midland Co.

Open Interest in Future Deliveries

As reported by the C.E.A. for wheat, corn, oats and rye, and by the Board of Trade Clearing House for soybeans the open interest in all futures on the Chicago Board of Trade recently has been as follows, in 1,000 bus.:

	Wheat	Corn	Oats	Rye	Soybeans
Dec. 16	79,553	45,691	16,065	8,565	6,941
Dec. 23	83,538	48,280	15,628	9,534	6,957
Dec. 30	84,062	48,243	15,507	10,625	6,948
Jan. 6	86,017	49,517	15,329	11,532	7,011
Jan. 13	84,355	47,650	15,324	11,256	7,140
Jan. 20	84,136	46,876	15,096	11,842	7,230
Jan. 27	84,570	45,188	14,623	11,738	7,203
Feb. 3	79,457	43,857	14,161	12,475	6,746
Feb. 10	79,262	44,067	16,644	12,919	6,768
Feb. 17	81,351	44,400	14,427	13,021	6,701
Feb. 24	86,092	44,644	14,181	13,955	6,412
Mar. 2	90,782	44,234	13,888	13,847	6,397
Mar. 9	91,405	43,501	13,627	14,066	6,630
Mar. 16	91,195	42,464	13,561	14,224	6,497
Mar. 23	91,874	42,136	13,681	14,522	6,425
Mar. 30	95,090	41,538	15,560	14,861	6,326
Apr. 6	98,360	40,703	13,316	15,388	6,434
Apr. 13	103,489	39,872	12,989	15,911	6,377
Apr. 20	114,612	37,897	12,949	17,090	6,137
Apr. 27	124,422	34,933	12,675	18,379	5,781
May 4	128,045	31,613	12,601	17,875	5,172



Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Portland, Ore., May 3.—The American motorship Clevedon is loading wheat for Vladivostok.—F. K. H.

Portland, Ore.—From reports given at quarterly meeting of Pacific Northwest Advisory Board the movement of grain and grain products this quarter in this area will require use of 144,450 cars.—F. K. H.

Chicago, Ill., May 3.—On the basis of estimates made by our crop correspondents, about 12.7%, equal to 11,052,000 bushels of soy beans remained, on May 1, in the country on farms and local elevators. Our interpretation of May 1, rye condition reports is suggestive of a crop of 31.-380,000 bus.—Nat C. Murray, statistician, Jackson & Curtis.

Decatur, Ill., May 4.—Some corn continues to come out when growers can sell No. 2 yellow at 60c a bushel. There are some who consider present prices satisfactory and profitable and prefer to empty their cribs, appreciating how difficult it would be to move all the corn that is now on hand this fall in the event another good crop is produced.—Baldwin Elevator Co.

Duluth, Minn., May 3.—Heavy redemption of 1939 wheat loans featured last month, with a last minute rush to take equities before the maturity date April 30. Many producers held off closing up their loans waiting higher prices, then others again had loans so small the expense of repossessing practically ate up so much of the amount left in dollars that the owners let the CCC take it over and hope to come out better in the "pool."—F. G. C.

Houston, Tex.—Eight vessels loaded grain cargoes here last month with Rotterdam, Antwerp and Genoa being the destinations. The cargoes ranged from 40,000 bus. loaded for Genoa to a full cargo of 301,000 bus. loaded for Rotterdam. Indications point to little, if any, grain being handled through here in the coming few weeks. It is generally believed that the export movement of grain is virtually over for this season.—Houston Port Register.

Ottawa, Ont., May 2.—Canadian wheat in store for the week ending April 26, 1940, decreased 3,005,882 bus. as compared with the previous week and increased 166,436,011 bus. when compared with the corresponding week in 1939. The amount in store was reported as 301,351,776 bus. compared with 304,357,658 bus. for the previous week and 134,915,765 bus. for the week of April 28, 1939. Marketings in the three Prairie Provinces for the 39 weeks from Aug. 1, 1939, to April 26, 1940, as compared with the same period in 1939 were as follows, figures within brackets being those for 1939: Manitoba 51,223,144 (42.-028,662); Saskatchewan 214,839,599 (108,769,097); Alberta 119,972,790 (121,429,695) bus. For the 39 weeks ending April 26, 1940, and the same period in 1939, 386,035,533 and 272,227,454 bus. were received from the farms.—R. H. Coats, Dominion Statistician.

Oats Movement in April

Receipts and shipments of oats at the various markets during April, compared with April, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	117,401	83,902	.....	.....
Boston	17,300	9,750	.....	.....
Chicago	1,485,000	1,674,000	1,555,000	2,571,000
Duluth	89,753	203,056	130,610	16,650
Ft. Worth	98,000	32,000	88,000	42,000
Indianapolis	404,000	442,000	368,000	628,000
Kansas City	46,000	206,000	26,000	244,000
Milwaukee	65,540	6,780	58,900	57,000
Minneapolis	1,032,750	848,250	1,503,000	1,570,000
New Orleans	138,528	25,650	20,000	3,233
Omaha	97,125	252,000	172,392	436,648
Peoria	402,000	218,000	330,000	204,000
St. Joseph	148,000	258,000	42,000	94,000
Superior	43,544	137,333	174,775	229,973
Toledo	189,000	291,900	181,150	331,870
Wichita	1,500	.....	3,000	.....

Distribution of Corn Stocks

The U. S. Dept. of Agriculture on Apr. 27 gave out the following tabulation of stocks of corn Apr. 1, not including those privately owned in country elevators:

Position	Amount Million Bus.
Stocks on farms.....	1,286
1937 corn resealed.....	19
1938 corn resealed.....	141
1939 corn resealed.....	301
Sealed on farms.....	461
Unsealed on farms.....	825
Sealed by farmers in country elevators.....	13
Commercial stocks.....	40
Held by Government.....	.....
Steel bins.....	61
Country elevators.....	15
Terminal elevators.....	12*
Subterminal elevators.....	2*
Grand total.....	1,415

*It is assumed that most of this corn is included in commercial stocks.

Despite the rather heavy disappearance of corn from farms during the first 6 months of the 1939-40 marketing year, stocks of corn on farms Apr. 1 were unusually large thruout practically all of the corn belt east of the Missouri River. Apr. 1 stocks in Minnesota were more than four times as large as the 1928-32 average, and in Iowa and Illinois more than double this average. Even after deducting the total quantity of 1937, 1938, and 1939 corn sealed on farms, Apr. 1 farm stocks were much above average in the eastern part of the corn belt. In much of the area west of the Missouri River, stocks of corn were below this average.

Wheat stocks held by mills Mar. 31 were 122,935,059 bus., as reported Apr. 29 by the Bureau of the Census, against 105,902,891 bus. Mar. 31, 1939.

The Kansas Experiment Station kept 1,000 bus. of Turkey wheat that had been combined in 1927 in a farm steel bin until 1938 without going out of condition or showing signs of heating, insect or other damage.

By 8 to 1 the Supreme Court of the United States on Apr. 29 held that there could be no appeal from a ruling by the U. S. Dept. of Labor fixing wages for concerns selling to the government, under the Walsh-Healey Act.

Corn Movement in April

Receipts and shipments of corn at the various markets during April, compared with April, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	348,302	177,259	283,820	164,712
Boston	.....	1,980	271,386	.....
Chicago	4,759,000	4,676,000	4,587,000	2,284,000
Duluth	150,682	881,526	341,534	5,570
Ft. Worth	87,000	76,500	24,000	49,500
Indianapolis	1,132,500	1,576,000	1,132,500	1,551,000
Kansas City	1,036,500	888,000	624,000	750,000
Milwaukee	461,900	296,050	176,900	430,300
Minneapolis	705,000	964,500	993,000	1,113,000
New Orleans	90,902	911,855	219,500	839,847
Omaha	527,199	454,286	526,400	980,000
Peoria	1,533,100	1,798,590	493,200	764,900
St. Joseph	291,000	193,500	331,500	190,500
Superior	123,342	689,606	279,056	.....
Toledo	326,200	238,000	154,700	222,915
Wichita	1,300	.....	.....	.....

Rye Movement in April

Receipts and shipments of rye at the various markets during April, compared with April, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	173,865	59,004	.....	.....
Boston	1,100	1,100	.....	.....
Chicago	83,000	81,000	218,000	198,000
Duluth	385,480	147,704	10,055	16,098
Indianapolis	70,500	9,000	57,000	18,000
Kansas City	15,000	36,000	3,000	4,500
Milwaukee	18,120	18,395	124,245	7,530
Minneapolis	975,000	541,500	367,500	409,500
Omaha	123,200	28,000	64,453	51,800
Peoria	44,400	103,200	.....	10,800
St. Joseph	None	3,000	None	None
Superior	255,596	109,638	59,000	18,000
Toledo	26,600	15,400	14,115	10,035

Soybean Movement in April

Receipts and shipments of soybeans at the various markets during April, compared with April, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	.....	6,732	.....	.....
Chicago	.....	559,000	87,000	154,000
Indianapolis	21,000	15,400	36,000	176,400
Minneapolis	.....	.....	2,000	.....
Omaha	.....	1,500	.....	.....
Peoria	50,700	42,000	36,900	None
St. Joseph	21,000	6,000	None	None
Toledo	36,000	112,500	52,770	22,335

Grain and grain products were loaded into 35,933 cars during the week ending Apr. 27, against 35,229 cars during the like week of 1939, as reported by the Ass'n of American Railroads.

Winter Wheat Estimates

Chicago, Ill., May 1.—Crop statisticians make the following estimates for May 1 of the coming winter wheat crop, in millions of bushels: Miller, 455; Galvin, 441; Murray, 453; Donovan, 440; Snow, 421; Cromwell, 434; their condition reports, Galvin, 74%; Murray, 74.2%; Cromwell, 67.0%.

Rye estimate of yields are: Galvin, 32; Murray, 31; Cromwell, 31 million bushels.

Barley Movement in April

Receipts and shipments of barley at the various markets during April, compared with April, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	5,544	1,247	.....	.....
Chicago	1,197,000	751,000	351,000	219,000
Duluth	128,852	705,258	514,610	412,038
Ft. Worth	1,600	.....	1,600	.....
Indianapolis	None	1,500	None	1,500
Kansas City	35,200	38,400	6,400	27,200
Milwaukee	1,772,880	928,800	619,750	519,250
Minneapolis	2,752,300	2,153,900	3,077,000	409,500
Omaha	24,000	51,200	22,954	89,600
Peoria	314,400	309,400	211,700	146,000
St. Joseph	None	3,500	5,250	3,500
Superior	181,557	495,299	379,000	356,946
Toledo	2,800	2,800	1,370	29,485

Interior Stocks of Wheat

Washington, D. C., Apr. 29.—Stocks of wheat in interior mills, elevators and warehouses on April 1, 1940, are estimated by the Crop Reporting Board at 80,817,000 bus.

Combining stocks of wheat in interior mills, elevators and warehouses with those held on farms Apr. 1, 1940, gives a total of 238,301,000 bus.; compared with Apr. 1, 1939, stocks of 278,554,000 bus. which, with the exception of Apr. 1, 1933, stocks of 279,080,000 bus., were the highest in the 10 years of record.

Class	Wheat in Interior Mills, Elevators and on Farms (Thousand bushels)			
	1936	1937	1938	1939
Hard red winter	36,110	29,956	63,251	97,462
Soft red winter	37,074	26,246	50,866	45,687
Hard red spring	39,026	24,513	33,832	71,712
Durum	10,533	6,289	11,019	20,695
White	25,579	22,650	37,488	42,998
TOTAL	148,322	109,654	196,456	278,554

Wheat Movement in April

Receipts and shipments of wheat at the various markets during April, compared with April, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	448,809	324,939	3,650,648	171,749
Boston	174,193	.....	882,959	.....
Chicago	926,000	1,298,000	985,000	1,893,000
Duluth	5,329,383	1,758,761	873,560	17,520
Ft. Worth	397,600	361,200	1,085,000	684,600
Houston	.....	27,000	.....	836,534
Hutchinson	1,213,650	1,065,150	.....	.....
Indianapolis	130,000	125,000	109,000	55,000
Kansas City	5,384,000	3,897,000	1,408,500	4,092,475
Milwaukee	1,570	32,340	68,600	22,400
Minneapolis	14,431,500	5,791,500	2,409,000	2,352,000
New Orleans	18,514	.....	9,216	74,082
Omaha	884,206	1,072,314	673,846	691,600
Peoria	93,300	154,382	125,500	235,598
St. Joseph	574,400	225,600	787,200	347,200
Superior	2,444,375	825,729	396,646	16,476
Toledo	589,500	271,500	380,900	269,605
Wichita	1,834,500	1,216,500	898,500	825,000

Installation of Vehicle Scales

While wagon scales usually have the load distributed rather equally on the four wheels, motor trucks often have 85 per cent or more of the weight concentrated on the rear axle. Thus a scale will stand up under a wagon load of 20,000 lbs., but break down under a motor truck load of the same weight. The wagon in this instance places 10,000 lbs. on the end of the scale while the truck might place 17,000 lbs. on the end, the other end carrying only 3,000 lbs. Thus if it is planned to install a wagon scale to handle occasional truck loads not in excess of 12,000 lbs. its capacity should be 20,000 lbs. If heavier loads are to be weighed the installation of a truck scale is needed to avoid a break down.

While the weighing of long vehicles, two wheels at a time, may be tolerated on a few occasions on a scale installed several years ago, on all new construction the scale should be 30 or 40 ft. in length, or long enough to weigh the entire load at one time to handle semi-trailer combinations that are difficult to disconnect. The operator of a full trailer can readily disconnect, but even he may choose to haul his load of grain to an elevator having the longer scale deck relieving him of the trouble. A good minimum platform width is 10 ft.

For a distance equal to the platform length the approach should be level with the platform at each end. The location should permit drainage from the pit, and non-weighing traffic should be detoured around the scale.

By having the entire installation supervised by a competent representative of the scale manufacturer satisfaction may be guaranteed.

Concrete is the best material for floor and walls of the pit; and continuous pouring adds to its strength. Concrete also is the best support for the fulcrum stands.

Alignment of levers should be accurately level, the beam rod and steelyard rod and other plumb parts vertical.

The deck is best supported on a steel weigh-bridge, rigidly braced, and prevented from excessive movement by ball or roller checks packed with grease. By undercutting the edges of the platform by a small degree, small objects can be prevented from lodging between pit wall and platform. An opening of one-half inch between platform and coping should afford ample play.

The weighbeam is a unit with the scale and should be supported with the pit instead of

with the foundations of the scale house; and such complications as added extension levers from the normal lever system should be avoided. When the tip of the weighbeam is at the middle of its travel in the trig loop the beam should be horizontal.

For maintenance and occasional inspection the pit should be deep enough, with easy access from above.

In a jurisdictional dispute between unions of carpenters and machinists the carpenters were charged with restraint of the interstate trade of Anheuser-Busch, Inc., of St. Louis, Mo., and an appeal has been taken to the Supreme Court of the United States from the district court decision in favor of the union on the ground it was the purpose and not the effect of the union's action that controlled.

Barley for Adapted Areas

While barley undoubtedly ranks high as a field crop, it may not be the most profitable crop to grow under certain conditions. In the first place, barley is a crop which is more exacting than oats as to soil fertility and drainage. On rich, well-drained land and in areas enjoying ample precipitation, it may give better returns than any other grain crop, but where the soil is not so rich or where it lacks drainage, oats may be a better proposition.

In many parts of the Prairie Provinces, barley has been particularly popular as a cleaning crop. It may be sown late in the spring and still ripen before frost normally occurs, thereby affording an excellent opportunity to eradicate wild oats and other noxious weeds.

The question of variety and quality of seed used is also one of importance. In recent years, certain new varieties have been making their appearance. These are worth investigating. Therefore, those who contemplate growing barley for the first time in a number of years will be well advised to get in touch with the nearest Experimental Station for advice as to the variety which now is recommended for the particular district.

From the standpoint of feeding value for the various classes of live stock, barley ranks high. As a feed for bacon type hogs particularly, barley is recognized the world over as being one of the best of feeds. As a feed for beef and dairy cattle, barley is highly prized when fed in proper proportion in the mixture. Even for poultry, barley occupies a place of importance.—Searle Grain Co.

Protest Dual Inspection

The Board of Trade of Peoria, Ill., has sent the following brief to the federal grain supervision in charge of grain inspection:

The so-called dual inspection encourages uneven loading of grain in box cars at country shipping points, tends to excuse actual plugging knowingly committed, and further, such grading forces unpleasant tasks upon the terminal receiver in trying to explain what may seem to be an unreasonable discount.

It is impossible to make a direct transfer from such cars, and maintain either the dual inspection or an average represented by the same. Upon arrival at terminal markets the so-called uneven lots and sometimes plugged cars of grain present a serious problem.

Grain inspectors should not have the burden of attempting to make a guess of the amount represented by the dual inspection of the same car put upon them.

The terminal or private elevator operators are unable satisfactorily to unload and bin two or more lots of grain from a bulk car lot. The average employe unloading cars is unable to make the proper cut-off, and more good grain runs with the off-grade grain, and thus the elevator operator is forced to bin the car as a unit, which results in a hardship on the buyer.

The buyer usually places no confidence in pan tickets covered by dual inspection, for the simple reason that said ticket may or may not reflect the true grade in question, and an appeal on such lots of grain is of no value as they are sampled and certified on the same basis.

It goes back to the old basis that a car with two different grades without a bulkhead, particularly a No. 2 and sample grade, should be considered a plugged car and should be graded as of old, a car lot as a whole being graded on the inferior portion. This particularly applies to grain containing an appreciable amount of musty or low quality grain.

No effort should be made to make two grades of grain in a bulk carload when conditions are as follows: $\frac{1}{2}$ of car—No. 2 yellow corn, moisture 15.4%; $\frac{1}{2}$ of car—No. 3 yellow corn, moisture 17.0%.

The car of corn should be graded as a unit, the grade being No. 3, account moisture. The same rule to apply on all factors other than those reflecting out of condition grain, excess total damage, odor, etc.

The solution of uneven and plugged cars of grain cannot be solved thru the medium of dual grading certification. On the contrary, it may serve to promote a business that is undesirable.

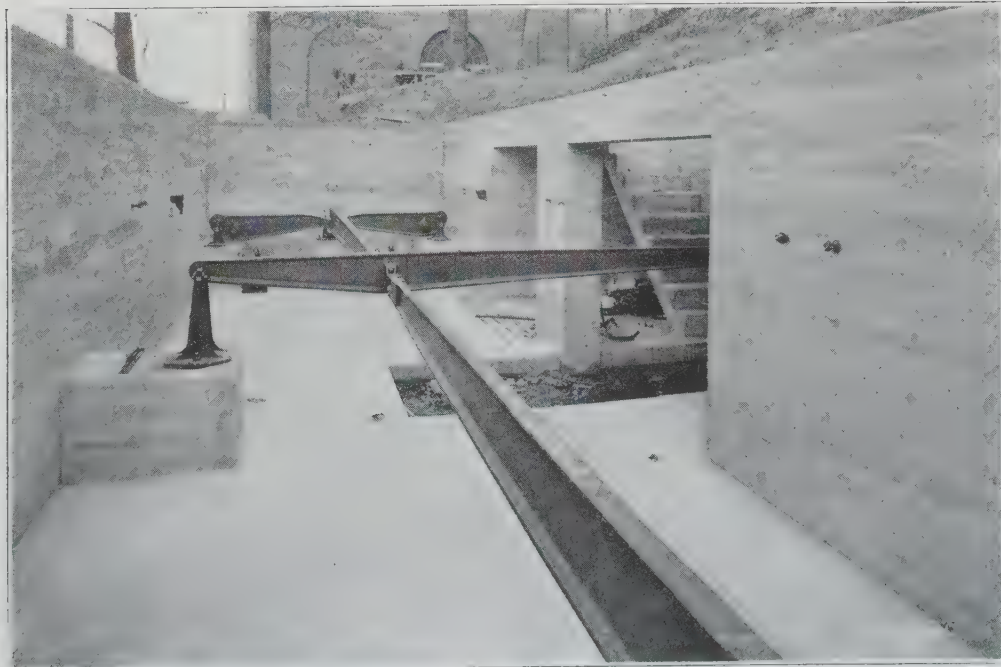
The old plugged car procedure of grading the entire carload on the worst grain found in the car penalized the loader or shipper had a tendency to eliminate so-called uneven loading. Common sense would suggest that we return to this old, practical and satisfactory method.

Government Loans Swelling Merchants Accounts Receivable

The tin cans which the AAA has strewn over the country to hold corn in an "ever-normal granary," will drive country elevator operators out of the side line business, says L. D. King of Tonica, Ill.

"When farm corn was free we had something to claim if a farmer failed to pay his bills for coal, or feed, or seed. Book accounts today are very difficult to collect. Cash gets spent and the accounts are left to ride to bigger and bigger totals.

"We are out of the coal business now. We've quit it entirely. If a farmer has cash he buys his coal from the trucker who hauls his grain and solicits his coal business. If he doesn't have cash, he comes to us, wants us to carry his account, but at the same time ties up his corn with a government loan."



Reinforced Concrete Scale Pit Designed by Bureau of Standards.

Illinois Shippers Demand Equal Proportional Rates for Rail Grain

The 47th annual convention of the Illinois Grain Dealers Ass'n in Peoria May 6 and 7 was favored with delightful weather and a large attendance of country shippers and central market receivers.

The invocation was delivered by Rev. R. H. Clarke, pastor of the Union Congregational Church.

GUY F. LUKE, President of the Peoria Board of Trade, welcomed the dealers and announced a visit to the distillery.

PRES. W. A. WEBB, LeRoy, read the following address:

President Webb's Address

As we gather for the 47th annual meeting of our Ass'n we are confronted with many problems, of which the sealed corn seems to be the greatest.

With over five hundred million bushels of corn either under mortgage to the Commodity Credit Corporation or held by it, business at the country elevator has almost stopped. In a lesser degree we had the same situation last year. After paying our employees their regular wages all summer to listen to the ball games or other radio programs, we had to employ considerable additional help to handle, in a six-week period last fall, the same volume of corn that under ordinary conditions would have been handled thru May 1 to Nov. 1. This added considerably to our overhead expense.

With free corn getting scarce, and with the war clouds over Europe getting darker all the time, it is to be hoped that the price of corn may stay high enough so that at least part of the sealed corn can be moved in an orderly way and avoid the congestion like we had last fall.

Following your resolution of last year to try and secure a better handling and storage contract from the C. C. C., Mr. Culbertson, together with Mr. Lawrence Farlow, sec'y of the Illinois Farmers Grain Dealers Ass'n, went to Washington, and in company with Nick Hubbard, E. B. Evans and C. H. Stout, had a conference with the A. A. A. officials. The decision was against any change in the contract. Accordingly the crop was handled and the farm cribs emptied in ample time for the new crop. I rather expect most of you who had steel bins to fill really breathed a sigh of relief after that job was done. I sincerely hope we do not have to build additional steel bins this fall. In case we do build more it would pay those of you who have several employees all the time to watch that it does not bring you in under the Illinois State Unemployment Act.

I had the very great privilege last week of attending the annual meeting of the United States Chamber of Commerce, held at Washington, D. C. The president of our National Grain Dealers Ass'n, Mr. E. H. Sexauer, is a director in this great organization and is also chairman of their agriculture resolutions committee. After hearing their resolution on agriculture read I think our Ass'n is amply repaid for the \$15 each year it costs us to belong to it.

With Sec'y R. B. Bowden of the National Grain Dealers Ass'n staying at Washington, D. C., a good deal of the time while congress is in session, I think we are well represented at the nation's capital.

I heard a great many wonderful speeches, and thru the greater portion of them a large degree of optimism prevailed. One of the speakers, a chemist said research was more potent than legislation in solving our troubles. He certainly demonstrated by samples of the chemists' recent discoveries. He showed the new nylon silk stockings, glass neckties and other important discoveries.

Several of the speakers said that various members were at the present time working out plans to restore world commerce as soon as the European war ends. They certainly should be called optimists.

If you could have heard the Hon. Howard W. Smith, congressman from Virginia, describe some of the iniquities of the Wagner Labor Act and the way the National Labor Relations Board is construing it, you would want even at this late day to give a vote of thanks to our secretaries and other able men of the grain trade who have done so much to keep us exempt from some of these restrictions.

If you could have heard Almon E. Roth, president of the San Francisco Employers Council, tell how the employers there were compelled to organize in order to get a degree of protection from contentious strikes on the water front, you would want to congratulate yourself that

you were located in a small town, where your business is still your own, your employees are your friends, and your mutual interests are not interfered with by some official possibly living many miles away.

SEC'Y W. E. CULBERTSON, Delevan, presented the following report:

Sec'y W. E. Culbertson's Annual Report

At our meeting in Springfield a year ago three major problems confronted us. First, the securing of the same exemptions for the employees of the country elevator under a state wage and hour law, being considered by our General Assembly, as was provided under the Federal Wage and Hour Act. Second, the securing for the elevator of at least cost for the handling and storing of grain from those agencies of our Government charged with the responsibilities of carrying out the Ever Normal Granary Program. Third, the securing of freight rate adjustments in order that the rail elevator be in a position to meet truck and barge competition.

State Wage and Hour Law.—As to the proposed state wage and hour law that would have taken away the exemptions we now have under the Federal Act and placed all employees of country elevators on a 42 hour week basis, with a minimum wage of 30 cents an hour and time and one-half for overtime. We were able, with the help of various other organizations, and by remaining constantly on the job, to keep this bill from being reported out of com'te, and with the adjournment of the General Assembly this threat to an increased cost in the operation of the country elevator passed for the time being. I say for the time being because spokesmen for organized labor state that with the convening of our next General Assembly the same bill will again be introduced and a greater effort made for its passage.

Revision of Handling and Storage Rates.—Pursuant to the resolution adopted at our Springfield meeting "that statistical material now available from the Department of Agriculture, the Federal Trade Commission, from State Colleges, Associations of Private and Co-operative elevators, and from private firms, indicate by overwhelming figures that the actual cost of handling corn and wheat thru the country elevators is in excess of the handling charges now proposed to the country elevator by Commodity Credit Corporation for the movement of their foreclosed grain; therefore, we urge upon this Federal Agency the establishment by available statistical material the principal of fair dealing, of a fair handling charge to be allowed the country elevator, which we believe they do not want to be below actual cost or even at only actual cost," your association, joining with the Farmers Grain Dealers Ass'n of Illinois and other state grain ass'ns, petitioned the Sec'y of Agriculture for a revision of the handling and storage rates as proposed.

We were granted an opportunity to present our case, and on Aug. 1 and 2 a com'te of eight, representing all country grain ass'ns, both independent and co-operative, with the exception of only one co-operative, from the surplus grain producing states laid our evidence before representatives of the A. A. A. and the C. C. C. and argued our case. Our request for a revision of the handling and storage rates, as proposed, was denied; however, as a result of our efforts the contract was amended so that the elevator could store corn under risk less than in the original contract.

At this time a new contract is being prepared that will soon be offered the elevators, but from information available it will not provide any increase in the total charges permitted the elevator over the present contract.

Freight Rate Adjustments.—The intrastate rates, effective April 19, 1939, included about 400 stations within a 100 mile radius of Chicago, and carried reductions of from one to five cents. Naturally there were some discriminations between stations, and this was especially true in the territory around Mendota, but thru an informal conference called by the Illinois Commerce Commission, where further adjustments were proposed and agreed to, which became effective June 7, these were in the main corrected.

These adjustments in rates have been effective in checking the trucking of corn to Chicago but further adjustments will yet have to be made in order to put the elevators on an equal competitive basis on various rail lines. While these local non-transit rates have checked the trucking of grain to Chicago, they have been of little value in checking the movement of grain by truck to Illinois river points because these river loading stations enjoy a 26c re-shipping rate to New York, while the grain arriving in Chicago on the local non-transit rate must pay 34½ cents. This is a discrimination against the

rail grain, and your Association, together with the Farmers Grain Dealers Ass'n of Illinois, is requesting the cancellation of this re-shipping rate on ex-river grain. The eastern railroads did publish an amended tariff cancelling this re-shipping rate on ex-river grain, effective October 15, 1939, but it was suspended by the Interstate Commerce Commission for investigation, and an order issued for a hearing, which was had in January before Examiner Taylor, in Chicago, at which I was present and stated the position of your Association. No decision has been rendered but should be soon as the suspensor order was until May 15th, which is not far away.

The present intra-state rates on corn expire as date of June 30th, but you Ass'n will put forth every effort that these be extended, and continue to work for further rate adjustments.

More time for reinspection on appeal at the Chicago terminal.—The regular demurrage rule provides that when grain inspected is reported by 11:00 a. m., disposition must be given by 6:00 p. m., which is not ample time for the reinspection. We have made some progress and I hope before long to be able to report complete success.

We have had to handle an increased volume of correspondence due to the handling and storing of Government grain. We have maintained the membership; however, we do have more members delinquent with their dues than a year ago, which accounts for the expenditures exceeding receipts, as shown by the following financial statement:

Financial Report			
RECEIPTS			
Balance on hand May 1, 1939.....	\$	555.68	
Membership Dues	\$3,225.00		
Directory Advertising	1,437.07	4,662.07	
Total		\$5,217.75	
DISBURSEMENTS			
Postage	\$	201.76	
Annual Convention		85.00	
Telephone, Telegraph and Express		69.56	
Office Supplies		25.13	
Annual Directory		400.99	
Dues to National Ass'n.....		115.00	
Dues to Chamber of Commerce		15.00	
Social Security Tax		33.00	
Stenographer		900.00	
Secretary's Expense		443.93	
Secretary's Salary		2,400.00	4,698.37

Balance on hand May 1, 1940..... \$ 519.88

FRED E. VERRY, Armington, gave the treasurer's report.

Monday Afternoon Session

WM. McARTHUR, Chief Commodity Loan and Crop Insurance Section AAA, in discussing the Responsibility of the Farmer and the Elevator Man in Achieving the Objectives of the Ever Normal Granary, attempted to justify the domination of farm activities, the acreage allotment and the bonuses for compliance. In the course of his address, he said:

The objectives sought include increasing and maintaining farm income. Conserving the soil and producing ample supply of food for city dwellers.

Crop insurance will no doubt go into effect for the crop of 1942.

Crop marketing agreements will no doubt promote the more efficient marketing of farm produce.

The stamp plan seeks to distribute burdensome surpluses of foodstuffs to those least able to buy.

Commodity loans are made for encouraging the holding off the market of surplus products. Excess feeding of cheap corn to hogs can be depended upon to result in cheaper pork products.

A year ago we had sealed for government loans 257,000,000 bushels of corn, while on April 1 this year we had 556,000,000 bus. sealed corn under loans. The people in Washington are worrying over how we are going to market this enormous surplus. Last year our carry over was 316,000,000 bus. free corn. On my farm in northern Iowa we have a large stock of corn and will hold it to insure our having feed for our livestock. We can not afford to let it go until a new crop is gathered.

Our corn acreage allotment for 1940 is expected to result in a crop of approximately 2,200,000,000 bus. About 90% of our corn crop is

fed on the farm where it is produced. Dumping a large volume of our surplus corn onto the central markets would greatly depress the price.

We had few farmers sell corn covered by a government loan, but a number of country elevator men have been guilty of converting stored corn.

The government's loan program resulted in wheat growers, who borrowed on their surplus crop last fall and sold last month, getting an extra return far beyond their expectations, but of course the producers could not expect to profit so much from holding every year.

Our corn acreage allotment program is designed to prevent the accumulation of an excessive surplus, but also to conserve our soil thru the planting of corn acreage to grasses.

An interesting paper on The Regional Research Laboratories by Dr. L. B. Howard was read by Dr. Lathrop.

R. O. CROMWELL, Crop Observer of Lamson Bros. & Co., presented his convictions on the National Crop Outlook during which he said:

In Nebraska 40% of state in central part wheat prospect is about 15% of normal as acres lost is $\frac{1}{2}$. Oats and barley were set back by freezes. Straws better east and west to good only in extreme southeast and fair to fairly good in the panhandle.

In Oklahoma corn is being replanted and barley abandoned. Some oats are heading short and some show thin stands. Some wheat which was thought to be a complete failure three weeks ago now believed to have a chance of making grain.

In So. Dakota 18% less than normal portion of expected wheat acreage is seeded in northern So. Dakota and southern No. Dakota. Farther north further behind compared to normal. May or may not catch up during germ and early growth. Sometimes goes in on time and too cold to come up which is just as bad as late planting or maybe worse if seed lays very long ungerminated.

R. B. BOWDEN, vice-president of the Grain & Feed Dealers National Ass'n, of St. Louis, reviewed the general position of the grain trade under national legislation now in effect, and sketched some of the legislative proposals now before Congress.

"While some improvements have been made in the uniform storage contract being offered by the government agencies, there are still points which many warehousemen insist should be incorporated into the contract before it is signed," he said.

Some of the more important points outlined as still asked in the contract by the trade he listed as (a) a definite cut-off date for all grains; (b) a contract dealing only with grain owned by government agencies; (c) reconciliation of conflicts between State laws and federal contract conditions; (d) limitation of grain storage substitution to grain of the same kind; and (e) improvement of the schedule of rates to meet storage and handling charges recognized as necessary to the continued well being of the grain trade.

He told of the work of the national organization in getting better recognition for cash grain commission merchants, the campaign for use of available terminal space before use of the steel bins for corn, and the demand for use of all types of trade organizations without discrimination against private business.

PRES. WEBB appointed as a Com'te on Resolutions H. C. Gring, Farmer City; J. E. Brennan, Chicago; T. E. Hamman, Arcola, and C. H. Stout, Gilman.

Nominations: H. A. Hilmer, Freeport; L. B. Walton, Mayview, and John Wallace, Forrest.

The Peoria Banquet

Three hundred and eighteen dealers and their wives enjoyed a sumptuous repast efficiently served in the large Ball Room of the Hotel. Following the dinner the visitors were entertained by the Peoria Board of Trade with a large orchestra, singing and dancing. Colonel Jerry McQuade serving as toastmaster.

Tuesday Morning Session

The well attended third session was most interesting. Pres. Webb read a telegram of greetings and good wishes from E. H. Sexauer, Pres. of the Grain & Feed Dealers National Ass'n.

JOHN E. BRENNAN of Chicago in discussing Trucks and Barges, said that the trucking of grain to the Chicago market was first solicited by the J. Rosenbaum Grain Co. in 1932 and gradually other Chicago elevator operators started buying trucked grain. The directors of the Board of Trade were helpless and couldn't forbid the buying of trucked grain, but operators advertising for trucked grain were induced to desist.

The Central Freight Ass'n held two hearings on the eastern rates discriminating against grain arriving in Chicago by rail in favor of grain arriving by barge. The state of Illinois at first opposed the cancellation of lower rates on ex-barge grain and later withdrew from the case.

The annual election of the Board of Trade last January resulted in changes in the directory and Mr. Brown, manager of the Board's traffic department, was instructed by the directors to withdraw his opposition to the low eastern rail rates on barge grain, but denied grain reaching Chicago by rail or truck. Last year 17,000,000 bus. of grain arrived in Chicago by barge and 5,000,000 bus. by truck. The ex-barge grain is granted a much lower rate over the eastern trunk lines than grain received by rail or trucks. All we ask is equal rates on eastern shipments of grain reaching Chicago by rail and trucks.

The Department of Agriculture has opposed the cancellation of the discriminatory rate on shipments over eastern trunk lines against grain arriving in Chicago by rail or truck without hearing the evidence in the controversy.

SINCE THE INCEPTION in 1933 of shipments of grain by barge to the Chicago market the handlers of such grain enjoyed the privilege of reshipping rates which was secured on the basis of the privilege granted by Eastern Roads on ex-Lake shipments. This had the sanction or approval of the Chicago Board of Trade.

The rail receivers of grain in the Chicago market patiently suffered on account of the discrimination in favor of barge shipments and prejudicial against rail shipments until the condition became intolerable.

In 1933 the receipts at Chicago by barge totaled 137,000 bushels. For the year 1939 the receipts at Chicago by barge totaled over 17,000,000 bushels.

The rail receivers of grain at Chicago numbering twenty-four consisting of individuals, firms and corporations authorized John E. Brennan, a Director of the Chicago Board of Trade, to make a survey and ascertain if pos-

sible the reason for the increased business of two elevator concerns at Chicago and the sharp decrease in the business of the numerous rail receivers of grain at Chicago. After a general survey and analysis of the existing conditions it was very apparent that the Chicago market was suffering from the discrimination in favor of barge shipments and prejudicial to rail shipments caused by the granting of reshipping rates on ex-barge grain at Chicago.

The attention of the Directors of the Chicago Board of Trade was called to this rank discrimination, and as a matter of policy the Directors of the Board of Trade instructed Mr. J. S. Brown, manager of the Board of Trade Transportation Department, to take immediate steps to have the existing discrimination removed.

The matter was laid before the Central Freight Ass'n and thoroughly discussed by representatives of the Chicago Board of Trade and the elevator interests. The findings of the Central Freight Ass'n and approved by the executives of Eastern Roads was the cancellation of reshipped rates on ex-barge grain.

The elevator interests secured a rehearing and at the rehearing the matter was again thoroughly discussed and the findings at the rehearing confirmed and approved the original findings of the Central Freight Ass'n.

The elevator interests have appealed to the Interstate Commerce Commission where the question will be officially and definitely decided. There has been opposition to the cancelling of reshipping rates on ex-barge grain by interests operating water houses who have been beneficiaries of the discrimination. There has also been some opposition to the cancelling of ex-barge rates by some farmers claiming that they were benefited several cents per bushel which they would not secure if the reshipping rates on ex-barge grain were cancelled.

The answer to this complaint is that neither the operators of water houses or farmers are justly entitled to any benefit secured through a discrimination.

The rail shippers of grain in the State of Illinois have been for sometime vigorously protesting against reshipping rates on ex-barge grain as the same is prejudicial to rail shipments. A rail shipper of grain to the Chicago market does not secure the benefit of reshipping rates on Intrastate rates while the barge having paid no rail rate whatsoever to Chicago enjoys the privilege of lower reshipping rates. All the rail shipper of grain as well as the receiver of rail shipments of grain in the Chicago market is asking is "EQUALITY." We ask no advantage whatsoever over barge shipments but we do protest against barge shipments securing a preference rate.

G. E. MELLON, Mazon, a few years ago a young man of vision, built a small elevator at Morris and advised the elevator operators of that section what he was paying for grain.



Sec'y W. E. Culbertson, Delevan; Pres. W. E. Webb, Le Roy; and Wm. McArthur, Washington, D. C.

Millions have been spent in improving the Illinois river channel. When this elevator operator retired from the business, a number of independent farmers and elevators banded together for taking advantage of the lower rates on exchange grain east bound from Chicago and now they truck their shipments to a river elevator which forwards the grain to Chicago by barge. This enables us to pay a better price for grain and relieves us of wild cat trucker competition.

Mr. Mellon admitted the ownership of stock in a river elevator.

M. L. VEON, Chicago: The rate on ex-lake grain first applied only to grain arriving by lake steamers. Later this was changed to all grain arriving by boats.

G. E. BOOTH, Chicago: Moved a vote of thanks to Jno. E. Brennan for his splendid work for equity in transit privileges between intrastate rail rates and barge shipments of grain received in the Chicago market.

Seconded by Mr. Mellon and carried.

CHAS. V. ARNOLD, Hillview: Usually we handle about 240,000 bus. each year but already we have lost about half our volume to the trucks and they overbid us 4 to 5 cts. a bushel. They are taking our business. The railroads must realize that they will lose the rail shipments or meet the competitive rates of the barges and trucks. I do not believe the country elevator is obsolete, but what can we do about it?

JOHN SCHUMACKER, Verona: If we do destroy the advantage of barge shipments to Chicago, grain buyers near to the river will be again at the mercy of the truckers. We own stock in the Allied Grain at Seneca and own one barge.

MR. BRENNAN: All we are asking is equality in east bound rates for grain received at Chicago via rail and trucks. The petition for equal rates originated with the two grain shippers associations of Illinois and after a year's futile efforts the Chicago receivers joined in the demand for equal rail rates on all grain shipments east bound out of Chicago.

CHAS. T. REES, Bradford: Has the statement that water transportation is cheap transportation been challenged? I am convinced that it is not cheap. Taxpayers pay for its establishment and maintenance.

Resolutions Adopted

L. W. RAILSBACK, Weldon, of the Resolutions Com'te presented the following resolutions:

Protest Intercession of Dept. of Agri.

WHEREAS, the United States Department of Agriculture has declared its intention to participate in the oral argument before the Interstate Commerce Commission in the case entitled Investigation and Suspension Docket No. 4718, Grain Proportionals, Ex-Barge to Official Territory, and to file a brief to any proposed report that may be contrary to the views of the Department; and

WHEREAS, the Department of Agriculture has stated, among other things, "that it is unreasonable and unjust for the rail carriers east of Chicago, etc., to undertake to assess higher charges on grain reaching Chicago via barge than on grain reaching Chicago via lake or via rail"; and

WHEREAS, the position taken by the Department of Agriculture in this case is detrimental to the interests of the large majority of grain producers and country shippers in Illinois; therefore, be it

RESOLVED, that the Illinois Grain Dealers Ass'n hereby protests any such action contemplated by the Department of Agriculture, and requests that the Department of Agriculture desist from any further participation in this case; and be it further

RESOLVED, that a copy of this resolution be sent to the Secretary of Agriculture and to the United States Senators and Congressmen from Illinois.

Ask Joint Com'te on Transportation

WHEREAS, it appears that these facts are self-evident; that transportation is one of our major problems, that the development of improved highways and the Illinois Waterway have made it necessary for the rail carriers to adjust their grain rate structure to enable them to compete with new forms of transportation,

that the country grain dealers are in a position to assist the rail carriers in making necessary adjustments by keeping them advised as to nature and extent of competitive operations, and that this advice should be given with precision and authority; therefore, be it

RESOLVED, that this Association invite the Farmers Grain Dealers Ass'n of Illinois to co-operate with us in setting up a joint committee representing the country grain trade in Illinois, to make a study of transportation problems in Illinois, to convey to proper representatives of the rail carriers any important information that may be developed by such study, and to sit in conference with representatives of the rail carriers to advise and assist them in establishing and maintaining fair and equitable rates on grain from our respective farming communities to the various terminal markets, processing centers and deficit feeding areas; be it further

RESOLVED, that we call upon the membership of our Associations to cooperate with such committee, if and when formed, by keeping the committee fully informed at all times as to the nature and extent of truck and barge operations, and the effect of such operations upon the amount of grain originated for rail shipment in their respective communities.

Inspection of Soya Beans

WHEREAS, Soya Beans have reached a volume of production sufficient to warrant their designation as a major crop, thereby meriting the same facilities of handling, and of inspection, awarded to kindred crops; therefore, be it

RESOLVED, that the United States Department of Agriculture be requested to relegate the inspection of Soya Beans to the Department of Grades and Standards.

Prompt Pay for Handling CCC Corn

WHEREAS, the overhead expense of the Country Elevator is constant, and its current income in many instances of vital concern to its operation;

THEREFORE, we would respectfully request the Commodity Credit Corporation to compensate the elevator for handling or storage promptly upon completion of such services.

H. A. HILLMER, Freeport, presented the following nominees and all were elected without opposition: President, W. A. Webb, LeRoy; 1st V. Pres., E. R. Peters, St. Joseph; 2nd V. Pres., F. C. Dewey, Annowan, and Treas., Fred E. Verry, Armstrong.

Directors: L. J. Colehower, Wenona, V. L. Horton, Tolona; A. C. Koch, Breese; L. M. Walker, Gilman, and H. C. Gring, Farmer City.

At a meeting of the Board of Directors immediately following adjournment of the last session W. E. Culbertson was reelected Sec'y and the invitation of the cash grain commission merchants to hold the 1941 Convention of the Ass'n in the assembly room of the Chicago Board of Trade was accepted.

In Attendance at Illinois Convention

ILLINOIS SHIPPERS: L. C. Abenbrink, Edwardsville; R. B. Allen, Allerton; LeRoy Allison, Easton; P. E. Allison, Greenville; C. V. Arnold, Hillview; Roy Atherton, Walnut; O. J. Bader, Princeton; L. L. Banta, Lowpoint; Chas. Banacks, Villa Grove; I. B. Barrett, Streator; J. T. Beall, Niantic; Henry Blessman, Gridley; H. A. Bolliger, Tremont; Chas. Bonges, Ottawa; L. N. and V. L. Bowman, Winnebago; J. A. Bridson, Thawville; H. O. Bruce, Niantic; B. H. Carius, Tremont; C. C. Carter, Rossville; W. P. Cavanaugh, Ottawa; L. J. Colehower, Wenona; O. A. Collins, Tuscola; J. C. Connaghan, Niantic; G. A. Crook, Norris; R. L. Coomber, Freeport; J. Harry Cox, Cerro Gordo; Lionel Cox, Princeton; F. J. Craver, Elkhardt; Earl Crow, Blue Mound; Leo and Russell Delaney, Wapella; Harry and Robert Dewey, Pekin; John Dewey, Camp Grove; R. W. Erdmann, Williamsville; Waldo Erickson, Dallas City;

Edwin Farlow, Seymour; M. P. Ferris, Irwin; H. J. Flesner, Rantoul; Ed Glennon, Bement; H. C. Gring, Farmer City; H. A. Gunther, Morton; V. T. Hamman, Sullivan; W. L. Hannon, Ivesdale; J. A. Harrison, Chenoa; C. G. Hauter, Morton; W. M. Herbst, Franklin Grove; George Hieronymous, Winchester; G. B. Hill, Sr. and Jr., Mansfield; H. A. Hillmer, Freeport; R. Hippen, Forrest; M. J. Hogan, Seneca; G. H. and J. F. Hubbard, Lincoln; Howard Huckelberry, Arthur; S. S. Humphreys, Atkinson; Leonard Jarvis, Exline; Roy Jones, Monticello; C. P. Kennell, Camp Grove; C. C. King, Pittsfield; A. C. Koch, Breese; R. W. Leetch, Forrest; L. W. Lindsay, Lexington; W. W. Luhring, Weston; H. C. Lyman, Niantic;

G. D. Marshall, Stronghurst; S. R. McClintic, Dallas City; Bert McClister, Mackinaw; J. R. Martin, Waynesville; G. E. Mellen, Mazon; L. K. Meyer, Belmont; C. O. Mearle and C. E. Morgan, Roseville; Raymond Muir, Tuscola; F. J. Morrissey, Sublette; W. E. Munson, Savoy;

E. C. Murphey, Farmer City; E. Musselman, Tremont; E. M. Owen, Tuscola; J. B. Owen, Armstrong; C. W. Parry, Chenoa; J. R. Peasley, Dallas City; N. R. Peine, Minier; C. W. Peterson, Grand Ridge; Lawrence Pittman, Hammond; C. J. Potter, LaRose; Paul Pratt, Armstrong;

Richard and L. W. Railsback, Weldon; C. C. Rager, Latham; C. T. Rees, Bradford; Clair Ringle, Cambridge; C. A. Rodibaugh, Westfield; A. P. Schantz, Lexington; J. H. Schumacher, Verona; C. F. Scott, Illinois; A. M. and J. P. Shields, Benson; J. A. Simpson, Minonk; G. M. Shinghoff, Hoopeston; C. O. Snedeker, Ipava; G. H. Spainhower, Blandinsville; C. G. Sparks, Mackinaw; Lloyd Sparrow, Dallas City; M. J. Stotler, Streator; J. F. Sullivan, Irwin; P. F. Tabor, Sullivan; Richard Talbott, Manito; Carl Thorell, Ferris; R. P. Vanetten, Easton; F. E. Verry, Armstrong; Merl Wakefield, Broadwell.

J. F. Wallace, Forrest; G. H. Waller, Maroa; G. H. Walters, Maquon; L. B. Walton, Mayview; J. P. Watkins, San Jose; W. A. Webb, LeRoy; C. B. Wesley, Sidney; R. M. Wheeler, Onarga; Virgil Wilkey, Secor; J. J. Wink, Fairbury; B. M. Wise, Cadwell; R. J. Wrenn, Roanoke; H. M. York, White Heath, and L. W. Young, Buffalo.

BLOOMINGTON: H. J. Moore, W. E. Martens, H. C. Banks, R. C. Baldwin, J. N. Bailey.

CHAMPAIGN: M. B. Hyde, W. A. Schreiber, H. R. Sawyer, P. M. Faucett, A. J. Cope and J. C. Fielding.

DECATUR: L. J. Rudy, E. E. Rice, Ross Livergood, T. E. Hamman, H. W. Glessner, E. B. Evans, C. P. Cline, F. H. Barkley, H. J. Kopp and W. C. McGuire.

SPRINGFIELD: W. H. DeBolt, F. J. Weis, K. Murphy, Francis Fernandes, N. A. Midden, E. H. LeGrand, Chas. Teitsworth, Edw. Palmen and Allen Moore.

CHICAGO grain firms were represented by: J. J. Coffman, E. W. Bailey & Co.; H. M. Barlow, C. MacDougall, J. A. Freeman, T. J. Lawler, C. D. Olsen, A. G. Williams, Jas. E. Bennett & Co.; Phil Sayles, Cargill, Inc.; John Benson, Paul Feuer, H. B. and J. O. McClintock, J. H. Schumacher, Continental Grain Co.; Leo Crawley, Art Davis, M. B. Hitzeman, Gus Klein, H. A. Mulholland, C. H. Stout, V. A. Wiese, Lowell Hoyt & Co.; G. E. Booth, R. O. Cromwell, R. E. Disbrow, S. J. Haight, J. L. Meara, Edward Nieft, Wm. Tucker, Lamson Bros. & Co.; A. J. Bailer, T. A. McCullough, Quaker Oats Co.; J. W. Altorfer, R. N. Bunch, Gordon Hannah, E. F. Havey, P. H. King, Jack Brennan, Steve Hercek, O. M. Hibberd, A. J. Pollak, J. P. Ryan, J. H. Summers, G. B. Van Ness, Jr., and M. L. Veon.

ST. LOUIS: R. E. Wiese, F. J. Sommer, O. H. Schwarz, L. F. Schultz, R. L. Parker, Dan Mulally, P. C. Knowlton, M. B. Grover, H. L. Boudreau and A. H. Beardsley.

INDIANA: L. E. Greenwood, Rennesslaer; Lew Hill, E. K. Shepperd and C. M. Record, Indianapolis.

MINNEAPOLIS: F. E. Benson.

TENNESSEE: W. P. Bearden and R. W. Hale, Nashville; J. W. Jefferson, Union City.

SEEDSMEN present included: H. C. Myers, Crabbs-Reynolds-Taylor Co., Crawfordville, Ind.; F. H. Weeks, Ed F. Mangelsdorf & Bro., St. Louis; Wm. R. Bower, Kentland; C. H. Clark, Chicago.

INSURANCE representatives were: J. D. Stevens and J. T. Peterson, Grain Dealers Mutual Fire Ins. Co., Indianapolis, and J. J. Droste, Millers Mut. Ins. Co., Alton, Ill.

SUPPLY TRADE was represented by: C. L. Bevier, S. Howes Co.; L. W. Faulkner, Seed Trade Reporting Bureau; J. N. Deck, Kewanee Mehy. & Conv. Corp.

FEED INGREDIENT representatives were: L. E. Graves, Jack Clark, J. L. Dickinson, A. W. Treffer, Dave Shellerbarger, H. H. Richardson, N. P. Noble, H. F. Watkins, D. D. DeForest.

ASSOCIATION representatives present were: R. B. Bowden, Grain & Feed Dirs. Nat'l Ass'n; Laurence, Farlow, Farmers Grain Dirs. Ass'n of Ill.; L. W. Patzer, Illinois Grain Dirs. Ass'n and Fred K. Sale, Indiana Grain Dirs. Ass'n.

GRAIN EXCHANGES were represented by Joe Schmitz, Chicago Board of Trade; W. J. Krings, Ray Gutting and R. R. DeArmond, St. Louis Merchants Exchange.

Others present were: M. C. Kabel, Urbana, Ill.; D. H. Coffman and J. C. Howell, Chicago; J. H. McNance, Bloomington, Ill., and Herb Dude, Pontiac, Ill.

LADIES registered: Mesdames R. B. Allen, Allerton; O. J. Bader, Princeton; W. P. Bearden, Nashville, Tenn.; A. H. Beardsley, St. Louis, Mo.; R. L. Coomber, Freeport; Mabel N. Cox, Cerro Gordo; R. R. DeArmond, St. Louis, Mo.; E. B. Evans and T. E. Hamman, Decatur; W. L. Hannon, Ivesdale; G. B. Hill, Mansfield; J. W. Jefferson, Union City, Tenn.; W. McArthur, Washington, D. C.; Earl Murphey, Farmer City; L. W. Patzer, Delavan; L. F. Schultz, St. Louis, Mo.; C. F. Scott, Illinois; Joe Sowa, Delavan; G. H. Waller, Maroa and W. A. Webb, LeRoy.

[Concluded on page 397]

Exhibits at Peoria

FAIRBANKS MORSE & CO., represented by A. J. Cook, George Betzelberger, Pat Klumpers and Oscar Anderson, exhibited the new Fairbanks motor truck scale beam.

EDWARD J. FUNK AND SONS exhibited samples of hybrid corn with Carl Funk in charge.

SOWEIGH SCALE CO., represented by J. B. Sowa and L. G. Slumbaugh, distributed canes. PRONTO PRODUCTS CO., represented by H. T. O'Shea and B. W. Boxmeyer, displayed fumigants.

REGISTRATION was conducted by Louis W. Patzer assisted by Miss Marion Putman. Badges were supplied by Grain Dealers National Mutual Fire Ins. Co., represented by J. T. Peterson and J. D. Stevens.

PENCILS were distributed by the Cleveland Grain Co.

THE COMMODIOUS convention accommodations on the first floor of the Hotel Pere Marquette are ideal. The entrance to the quiet assembly hall is through a large room equipped with comfortable lounge chairs. Across the hall is another large lounge with carpeted floor and many easy chairs and settees.

New Elevator of the Pendleton Grain Growers at Umatilla, Ore.

[Continued from page 399]

spout, compensating for rise and fall of the river, for loading into barges. The conveyor is driven by a 10-h.p. geared head motor, totally inclosed, thru a roller chain drive. A winch at the end of the gallery facilitates the movement of the dock spout. Conveyor rolls and convergers were supplied by R. R. Howell Co.

The entire loading operation at the rate of 3,000 bus. per hour is performed by three men.

Construction of the plant was begun in February by the Hogenson Construction Co., and the first barge was loaded Apr. 24.

A Power Car Mover

By substituting power for main strength the spotting of empty or loaded railroad box cars can be speeded up where no car puller or switch engine is available; and even if a locomotive could be had the power car mover operates at much less cost and when shipper desires.

In the Pierce Hydraulic Car Mover, shown in the engraving, either a gasoline engine or an electric motor drives the pump providing the liquid pressure to push up the hydraulic piston and raise the gripper on the rim of the car wheel.

The shoe and working parts are made of alloys to be practically unbreakable. Pressure on the hydraulic oil raises the temperature to 250 degrees, warming the moving parts which are made of high-tensile steel, eliminating chance of their breakage in cold weather.

Like all hydraulic devices this mover is very powerful. It can handle one or two loaded

cars, moving them on straight or curved track at a speed of eight or fourteen feet per minute, depending on rails and grade condition.

The parts used in the construction are standardized. The machine is 40 ins. long, 24 ins. high and weighs 245 pounds. It is mounted for easy movement from place to place on rubber-tired wheels that are retracted when the machine is in operation. Additional information will be supplied on application to the Nelson Sales Co.

Dry Roller Chains Wear Well

A roller chain run dry between sprocket wheels in the dusty atmosphere of a grain elevator will outwear a roller chain that is greased from time to time, according to Flack-Pennell, Michigan elevator machinery jobbers.

The theory behind this conviction is that dust does not stick to the dry surfaces of a roller chain. When the chain is greased dust becomes embedded in the grease to form a grinding compound that soon wears out the rollers and pins.

Application of the theory is to open roller chains. If the chains are inclosed in a dust tight cover, lubrication obviously would make them wear longer.

Washington News

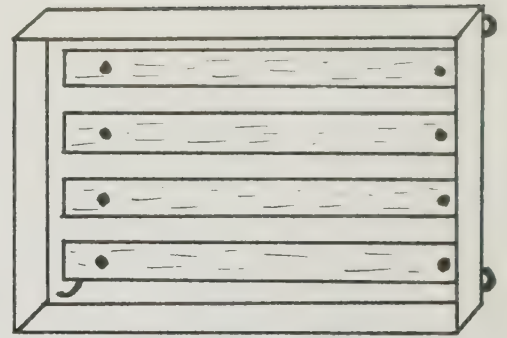
The agricultural appropriation bill continues deadlocked in the conference committee, the House members holding out against Senate increases.

The bill extending crop insurance to cotton was vetoed May 6 by the President, who said the government has not the back-log of experience to establish a sound actuarial basis.

Senator Capper's bill to create a special division in the U. S. Department of Agriculture to increase federal aid to co-operatives was indorsed by Sec'y Wallace when testifying before a senate agricultural sub-committee.

"In our opinion any establishment engaged exclusively in the distribution of merchandise may be considered a retail establishment if more than 50 per cent of the dollar value of its total sales are retail sales. Establishments which sell at retail and wholesale may not be considered 'retail' if more than 50 per cent (dollar value) of the sales are wholesale sales." —Philip B. Fleming, administrator Wage and Hour Division, U. S. Dept. of Labor.

The Wheeler-Lea transportation bill has met opposition from farm and labor agitators, and on May 2 consideration was postponed to the following week. The opposition states that the bill would be employed to stifle competition and bring waterway and motor vehicle rates up to the level of rail rates, regardless of the cost of the service. The bill would abolish the reduced land grant rates to the government, except on military or naval personnel or property. A Senate sub-committee will begin hearings on the bill May 24.



Electric Strip Heaters and Reflector Used by Cutler-Dickerson Co., Adrian, Mich.

Electrical Strip Heaters Warm Customers' Room

"We needed a place where our customers could stay warm and comfortable while waiting for their grinding," said Gerald Cutler, head of the Cutler-Dickerson Co., at Adrian, Mich., when he showed a visitor an 8x10 ft. customers' room built against the inside wall of the company's big warehouse.

The customers' room is simply a room, with several comfortable chairs in which farmers may relax and discuss the weather, the crops, and their politics while waiting for their grinding to be finished, or their pet feed formulas to be prepared.

The unusual feature about it is its heater. This consists of four 500-watt electric strip heaters, mounted on asbestos-lined sheet steel reflector, held an inch or so from the wall by china insulating blocks. The entire heating unit requires very little space, projects not more than five inches from the wall, is entirely safe from fire hazards, meeting every requirement of the Michigan Millers Mutual Fire Insurance inspectors, will cause no sudden, severe burn if a customer accidentally brushes against it. Yet it keeps the customer's room at a comfortable temperature.

The heater is of home design. The Cutler-Hammer strip heaters were purchased from an electrical supply house, and mounted in a reflector by a local tinsmith.

Of course electric heating costs money. "But we use so much electricity in this plant, with its grinders, mixers, cleaners, and other machinery," says Mr. Cutler, "that we always reach well into the lowest available rate for electricity. We figure it costs about 2c per hour to operate this heater which is cheap enough."

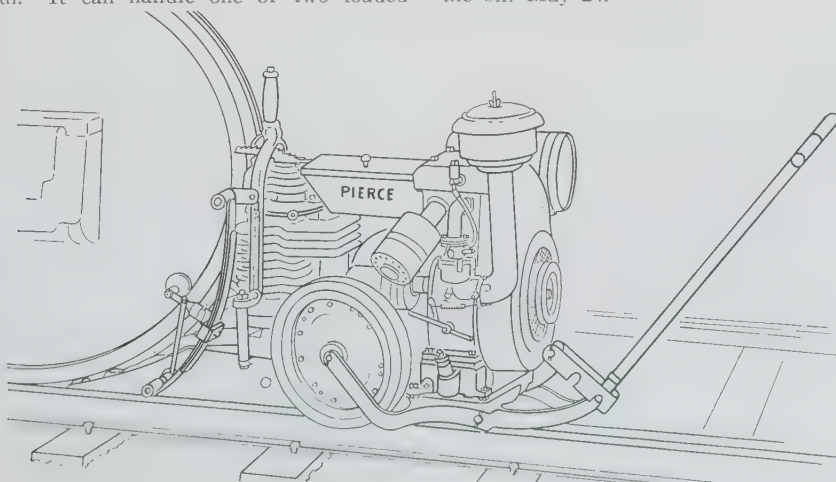
New Metal Developed for Permanent Magnets

Hammer mill manufacturers are playing with a new metal called "Alnico," an alloy developed by the General Electric Co. for permanent magnets.

Charged with magnetism, "Alnico" retains its charge indefinitely, becomes a magnet that will grip, hold, and lift more than 400 times its own weight.

Experimental installation of "Alnico" permanent magnets in elevator and feed mill spouts have successfully stopped and held rolling ball bearings, the most difficult test Mutual Fire Prevention Bureau engineers have been able to devise for testing such equipment.

One disadvantage is the permanent magnetic feature. "Alnico" will not release a load of tramp metal. The metal has to be "picked" off by sliding it to an edge, since at full contact between the magnet and the tramp metal the magnetism is so strong as to make difficult pulling the metal free.



Power Mover in Position on Rail

Car Mover Wheels Retracted

Improvements That Are Always Profitable

By R. D. MACDANIEL, Director of Field Service, Grain Dealers Mutual Insurance Co.

When the subject of property improvement is brought up owners and managers of country elevators will say, and regretfully, too, "Nope, not this year—don't want to spend the money." But there are a number of improvements, and rather material they are, that can be made without the expenditure of much money. Take the matter of surge protection, for instance.

LIGHTNING ON WIRES DANGEROUS: By "surge" is meant a sudden, momentary rush of high voltage, such as might be caused by lightning on a power wire. One second the transmission line supplying the elevator is carrying its normal voltage of, say, 6600 and the secondary line from transformers to elevator is at 220 volts. Then lightning hits the high line and a wave of maybe a million or more volts radiates along the line. When it reaches the transformer maybe the lightning arresters will take care of it and maybe not. If they don't, that million volt wave attempts to go through the transformers, and it usually does, by a short cut, which breaks down the insulation between the primary and secondary windings. Then it goes into the elevator where it may blow up the entrance switch with a lot of fireworks or start a fire in the meter or quietly puncture the windings of a motor or starter, or all of them in combination. All that is accomplished in an infinitesimal fraction of a second; thereafter the high-line is back to its normal 6600 volts. But the secondary into the elevator isn't back to its normal 220, that break in the transformer windings has let the high-line voltage come right on through and if the surge didn't do enough, the 660 volts will.

Now that sort of thing can be very effectively prevented and at small cost, too. All that is required is a capacitor of proper kind, a 30-ampere fuse block and cabinet and a few inches of wire and conduit. The capacitor is installed adjoining the entrance switch cabinet with the fuses in circuit ahead of it. Then a single wire is installed or use is made of one of the circuit wires or one of the light wires, depending on circumstances, to interconnect the ground wires at the transformer pole (the lightning arrester ground and the secondary ground) with the wire that grounds the conduit at the entrance to the elevator. That may sound somewhat complicated but actually it is not. Many utility companies will install the interconnection without charge because it helps protect their transformers. Others may make a nominal charge but even so the entire cost, including the equipment, is less than that of the usual power entrance switch.

Besides providing security against high voltage surge such a hook-up as has just been described will provide protection against another fairly common hazard—the "high resistance accidental ground." A short circuit or a low resistance ground in electrical equipment manifests itself immediately by persistent blowing of fuses.

High resistance grounds, on the other hand, by their very nature do not allow sufficient current to pass through them to cause the fuses to operate. Besides that, a hot spot may develop somewhere in the leakage path. Sometimes a fire is found smoldering in cribbing beneath ironcladding that is carrying leakage current. Occasionally a customer touches a piece of metal and is knocked across the driveway, or maybe his team will suddenly drop dead. Well, an interconnection such as was described makes a high resistance ground an impossibility because it furnishes a path of low resistance for all leakage currents. Truly, the providing of surge protection is a

most worthwhile low cost improvement for the operator of any electric powered elevator.

MOTOR MAINTENANCE NECESSARY: Then, there is this matter of motor maintenance. Comparatively few motors or starters go bad as a result of strictly electrical causes. In conversation with electrical repair men, we are told that most of the motors coming to them for repairs were damaged because they were not kept clean or because of faulty lubrication. Lack of proper care causes far more motor failures than any other single cause.

The ordinary open type motor must have ventilation, which is set up by built-in fans that draw air from the ends of the motor and force it through the windings, keeping them cool. Whenever this action is retarded the windings will heat, causing deterioration of the insulation on the wires. As this deterioration progresses, the possibility of breakdown increases.

Dust is detrimental to a motor because it prevents ventilation. Furthermore, this dust will absorb oil and form a mixture that is subject to spontaneous ignition. So, although the motor may not heat sufficiently to burn out from lack of ventilation, the amount of heat so generated may be sufficient to start the self-ignition process in the oily dust.

Motor failures due to improper lubrication could be better described as failures in maintenance rather than failures of equipment. A large proportion of these represent just plain negligence, some are occasioned by use of unsuitable lubricants, a few are actual bearing failures.

The ordinary electric motor is ruggedly built and will stand a lot of punishment, but it will not stand both punishment and neglect for long. Periodic cleaning and servicing of motors and starters is imperative if they are to be maintained in perfect working condition. A few dollars spent in having a careful check-up of electrical equipment by an experienced electrician some time during the next two months may save a lot of expensive grief some time during harvest.

The clearance between rotor and stator of the ordinary motor is just about .015 inches and any marked wear of bearings reduces this, thereby impairing the efficiency of the motor. Proper lubrication will do much to prevent bearing wear and automatic oilers on

sleeve and ring-oiling bearings will do much to insure proper lubrication. These are comparatively inexpensive and are not difficult to install. The bottle oiler is particularly adaptable for use with ring oiling bearings, maintaining the proper oil level without constant attention on the part of the operator.

Of course, these automatic oilers work just as well on other types of bearings. Thousands of them are in daily use in elevators throughout the country returning their original cost monthly in savings in oil and labor.

GRINDING EQUIPMENT NEEDS PERIODIC OVERHAUL: After spring pastures pick up and the feed business drops off is an excellent time to give the grinding equipment the once-over. Unless an operator is in the habit of opening up his grinder periodically for a close examination of the plates or hammers he is likely to be greatly surprised to learn that the reason for some of those big power bills lay in the fact that he has been *mashing* feed instead of *cutting* it. Cutting edges on plates and hammers will become dulled even with the best of magnetic separators ahead of the mill and as this occurs the cost to the operator of grinding a hundred pounds of grain increases to a surprising extent, and that increase in cost comes right out of the operator's pocket. Accidents, too, are frequently the indirect result of lack of periodic inspection and repair of grinding equipment.

An attrition mill case should be opened at least once every six months and the condition of the plates, spindles and their attachments carefully checked. Excessively worn parts should be replaced. Second-hand plates should not be purchased unless it is certain they are properly cast and assembled for flaws in castings or improper balancing may cause an accident. The best practice is to buy plates only from the manufacturer of the mill on which they are to be used. The repair of cracked or otherwise damaged plates is a job for an expert; a poor weld is dangerous. It is safer to buy new plates when the old ones show damage.

DUST NUISANCE EASY TO CONTROL: Then, there is this much-discussed subject of dust control which, contrary to popular opinion, really belongs in the category of low cost improvements. Dust control is rather a simple matter. It isn't a matter of collection and disposal at all, it's a matter of prevention, the prevention of excess air pressures largely. Agitate grain and atmospheric dust appears. If the dust stays where it belongs, it doesn't hurt anything or bother anybody but, when grain is agitated in a location such as an elevator boot, where there is



Dumping Sacked Wheat from Truck thru Grate in Driveway of Elevator at Umatilla, Ore.
[See facing page.]

excess air pressure, then the dust blows out and becomes a nuisance.

It is neither difficult or expensive to alleviate this nuisance and the results are usually most gratifying. A practically dustless basement can be attained in any country elevator through the installation of vent piping from boots to a fan powered with a motor of from 1/6 h.p. to 1 h.p. depending upon the number of boots and other equipment. As the pressure is relieved a small amount of dust leaves the boots and the function of the fan is simply to prevent this dust from settling in the vent piping. Such a system can be as extended and varied as one may please but basically the thing is simple and inexpensive.

These and many other improvements, fixed ladders to platforms at the elevator heads, roof ventilators, and that sort of thing can be made to country elevators without much expense and will improve the operating efficiencies and working conditions, returning their cost many times in safety to person and property.

New Elevator of the Pendleton Grain Growers at Umatilla, Ore.

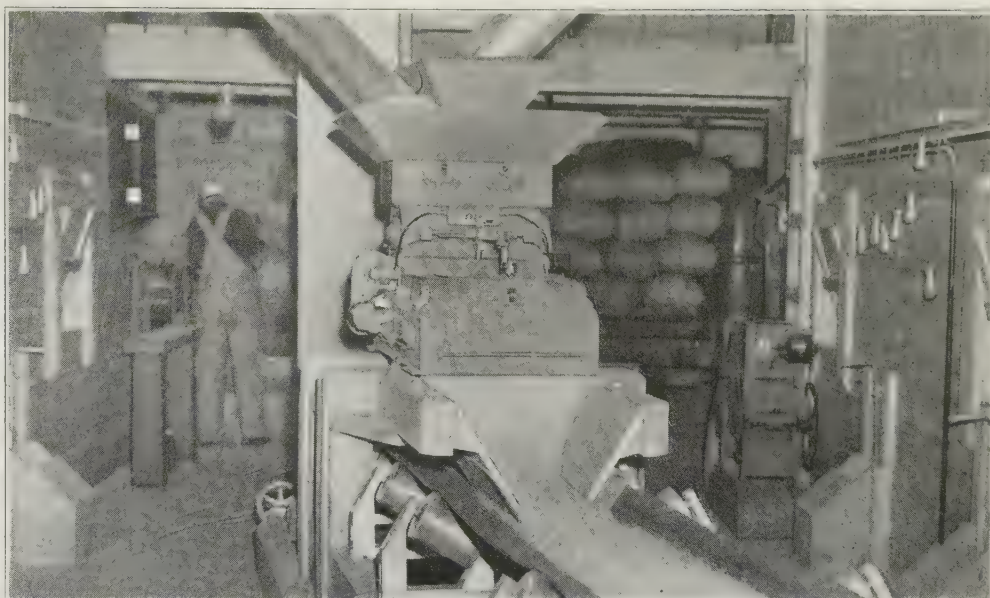
One of the great rivers of America, the Columbia, is the shipping outlet for the new elevator built by the Pendleton Grain Growers, Inc., at Umatilla, Ore.

From points within a radius of 100 miles trucks carrying as much as 500 bus. per trip concentrate grain to be weighed thru this elevator into river barges, that are towed to the ocean ports, Portland, Ore., or Vancouver, Wash.

The problem was not one of storage of which there is sufficient at the interior points; and neither is speedy loading capacity required, as a river barge holds only 20,000 to 25,000 bus. and can be filled to capacity in 8 hours. With its 40,000 bus. storage space this new elevator holds two barge-loads.

The plant comprises the 40,000-bu. elevator, with driveway for unloading trucks, and a 400-ft. belt conveyor gallery from elevator to river barges.

The elevator is of cribbed construction, roof, sides of cupola and driveway covered with corrugated iron. Its 10 overhead bins have hopper bottoms. The equipment includes one leg of 3,000 bus. per hour capacity, with 10x6



Recording Scale Weighing Running Stream to Belt Conveyor on Work Floor of Elevator at Umatilla, Ore. Background, Truck-Load of Sacks in Driveway.

Calumet Cups 9-inch centers on 11-inch 5-ply rubber belt driven by a 7½-h.p. totally inclosed Fairbanks-Morse Motor thru a Winter Head Drive; and a 10-inch radial Gerber Distributor spouting grain from elevator head to bins.

Directly under the bins is a Merchen Weigh Feeder, to which the grain is spouted from bins, and from which the grain is discharged upon the conveyor belt leading to barge.

The Merchen Scale records the amount of material by weight, passing as a running stream on a conveyor belt. Electric controls regulate the gates delivering the quantity demanded by the scale and maintains it regardless of variations in the stream. It is equipped with geared reduction motor of only ⅓ h.p., special steel conveyor belt, automatic recording tally and automatic stop. Its capacity can be varied from 100 pounds to 3,500 pounds per minute.

Grain is scooped out of trucks by a power shovel made by Howell and driven by a totally inclosed 5-h.p. Master Motor.

Sacks of grain are cut open and the grain

poured through the driveway grating into receiving pit. The grain is directed by inclined movable boards set up at each side of truck. This arrangement handles both trucks and semi-trailers, no dump being required. The steel grate is 8 by 10 ft.

Under the driveway is a waterproof concrete pit 22 ft. deep, containing an 800-bu. Fairbanks Hopper Scale, grain from the pit being conveyed to the scale by a 24-in. belt driven by a 1½-h.p. geared Master Motor.

The conveyor gallery is 400 ft. long, leaving the elevator at work floor level, which is 2-ft. above recorded high water mark, and is supported by heavy concrete piers. It is constructed of structural iron covered with corrugated metal. The piers were built when the water level was low, a coffer dam being necessary only in building the pier farthest out. A 25-ft. rise in the water level will come to within but one or two feet of the top of the concrete pier. A 24-in. rubber belt carries the grain from the elevator to a Hogenson Special Discharge Hopper thru a telescoping dock [Concluded on page 397]



New 40,000-bu. Elevator and Belt Conveyor Gallery of Pendleton Grain Growers at Umatilla, Ore. [See facing page]

Grain Carriers

Wichita, Kan.—The Trans-Missouri-Kansas Shippers Advisory Board will meet at the Allis Hotel June 10 and 11.

Salt Ste. Marie, Mich.—Breaking of the ice blockade in Whitefish Bay by three steamers the night of Apr. 20 opened navigation into Lake Superior.

Owen Sound, Ont.—With 280,000 bus. of corn from Chicago for Collingwood the steamer Negaunee ran aground Apr. 30 on Surprise Shoal in Georgian Bay.

In 1929 the railroads had 1,660,850 employees, in 1939 only 987,943, but the average annual pay increased from \$1,744 to \$1,886, according to the Railway Age.

Quincy, Ill.—The Missouri-Illinois Grain Co., on Apr. 24, shipped a barge-load of 15,000 bus. of corn down the Mississippi, up the Ohio and Cumberland Rivers to Nashville, Tenn.

Buffalo, N. Y.—The first grain boat of the year to come down the Great Lakes was the J. E. Ferris which arrived at the Superior Elevator from Chicago to unload 308,000 bus. of corn.—G. E. T.

Chicago, Ill.—A hearing was held by the Interstate Commerce Commission Apr. 26 on the application by Kansas City, St. Joseph, Omaha, Minneapolis and St. Louis markets for cancellation of the rate break rule, giving them transit on the inter-market proportional rates.

Duluth, Minn.—A strike of tugmen, line-men and oilers is on at 15 Great Lakes ports, for increase in wages, against the Great Lakes Towing Co. Government officials have stepped in at Cleveland, O., to mediate the matter. In Duluth 40 men and 5 tugs are affected by the strike.—F. G. C.

Chicago, Ill.—The C. F. A. and the W. T. L. heard interested parties Apr. 30 on the proposed reduction in export grain rates of 4 cents per 100 lbs. to the east, to enable the eastern lines to compete with the gulf. The B. & O. desires the cut, and there is some doubt as to points of origin.

Kingston, Ont.—With 95,000 bus. of grain for Montreal the freighter Grainmotor struck the side of the canal, water poured thru the hole, and the ship sank in the north channel of the St. Lawrence River Apr. 24. The boat was floated, but not until 40,000 bus. of the grain in 3 holds was damaged by water.

Ft. William, Ont.—After clearing from Ft. William Apr. 30 with 98,000 bus. of wheat for Owen Sound the steamer Arlington foundered early next day in a violent storm on Lake Superior. The crew, except the captain, Fred Burke, were rescued by the Collingwood, which had followed the Arlington out of Fort William.

Duluth, Minn. Navigation for the 1940 season opened officially Apr. 22, with the arrival of the St. Benson Ford carrying coal from Toledo, as defined by the rules of the Board of Trade. Contracts made for shipment of grain on the opening of navigation have ten days from this date for reporting; loading cargoes and departing.—F. G. C.

Chicago, Ill.—The directors of the Board of Trade have instructed its Transportation Department, J. S. Brown, manager, to withdraw from further participation in the matter of reshipping rates on barge grain at Chicago now before the Interstate Commerce Commission. Tariffs canceling the privilege filed by the railroads who desired to minimize waterway competition are under suspension.

Salem, Ore.—The supreme court here today wrote finis to the hopes of some 55 Eastern Oregon wheat shippers for participation in

freight refunds of more than \$211,000, when it affirmed a decree of Judge L. G. Lewelling providing for reparations. The first decree of the lower court favored the shippers but the railroads appealed and the supreme court reversed the decree and sent the case back for a new trial which resulted in a decree in favor of the carriers, which has now been affirmed. Commissioner Thomas' orders were based upon alleged excess collections of freight charges upon 995 carloads of grain in that the carriers were charging the shippers interstate rates upon wheat he once held to be intrastate shipments.

In his opinion Apr. 16, Chief Justice Rand held the commissioner's orders to have been based upon an "erroneous conclusion of law" in that the shipments in question were really destined to another state or to a foreign country altho they were moved under straight Bs/L from the point of origin in Oregon to Portland.—F. K. H.

New Calumet Elevator in South Chicago

[Continued from page 387]

gaging frame and revolved automatically above the main flow of grain after some of the pressure against the frame has been relieved. The door is held in its revolved position during the dumping operation. When the car is righted the door opener frame is removed by means of the hand wheel and the door falls on the car floor.

The door opener frame has a vertical adjustment, and is moved laterally as a unit to and from the car through its pivotal movement. The frame is so counter-balanced that it is only necessary to overcome friction in this operation. A manually operated baffle plate is inserted diagonally across the car floor on the last endwise tip, thus deflecting to the door opening any grain which might otherwise run past.

Two stationary end posts are provided under the ends of the car supporting platform on the side opposite the dumping side and two end locks, operated by the end clamp carriages, are provided on the dumping side to carry the weight of a loaded car or locomotive when passing over the dumper. The end locks are operated automatically by the end clamp carriages, and absolutely eliminate any possibility of an accident due to failure of the ends of the platform to be supported when a car is entering. The tipping of the car sidewise gives sufficient clearance to make the removal of the end posts unnecessary.

The loaded grain car is spotted on the platform of the unloader, with the outer door of the car open on the dumping side. The disappearing end clamps of the unloader are simultaneously brought into position in contact with the car couplers, and positively center the car on the main cradle. This operation automatically removes the two end locks on the side towards which the car tips laterally.

The door engaging frame is then brought into contact with the grain door, and the car tipped sidewise 15 degrees. The main cradle is next tipped to a maximum angle of 40 degrees to the horizontal in one direction, to discharge the grain from one end of the car, and then to 40 degrees in the opposite direction to discharge a portion of the grain from the opposite end. The baffle plate is then inserted through the door opening, and the cradle tipped to an angle of 40 degrees to the horizontal in the direction of the first endwise tip, discharging the remainder of the grain from the car.

After the car has been emptied of its load, the car supporting platform with its empty car is again brought to normal horizontal position. The door opener is withdrawn, and the end clamps run into their pits, which operation automatically locks the ends of the car supporting platform. The empty car is then

ready to be moved off the platform. The time required for the complete cycle of operation for the Link-Belt unloader is 4½ minutes, and under favorable operating conditions an unloading capacity of eight cars per hour can easily be attained.

The grain is discharged from the car door into a 2000 bushel capacity hopper, provided with gratings to keep out foreign matter such as boards. A 48" wide Link-Belt no-leak apron feeder, driven by a 15 H.P. motor, withdraws the grain from the hopper and delivers it to the elevator.

THE HESS DRIER which was installed in the old Calumet Elevator in 1901 was not destroyed by the fire of 1939 so the drier and building was moved to a new location and converted to an oil burning direct heat drier with many improvements. Grain is carried back to the working house by a 24 inch belt conveyor.

THE NEW STORAGE is composed of 36 reinforced concrete tanks, 23 ft. 9 in. in diameter by 100 ft. high. These tanks are arranged in four rows of nine tanks each giving much additional storage room in the 24 interstice bins. Two of the large cylindrical bins in row next to slip are provided with false steel hopper bottoms and equipped with 15 in. dock spouts so that grain can be sent direct from these two shipping bins to the holds of lake steamers. Grain is carried to these storage bins from work house, by means of three 42 in. belt conveyors. In the basement four 36 in. belt conveyors carry grain from bins to legs in the workinghouse. Three 36 inch belt conveyors carry grain across from the longitudinal belts under the bins of the old storage house.

Cupolas over all storage bins as well as the bridge connecting the cupolas are formed of structural steel with a steel deck roof and corrugated iron siding. All side walls contain large windows so that in case of an explosion of grain dust any damage done to cupola can be quickly repaired or the entire cupola replaced without great cost.

The electrical installation is in accordance with code requirements for Class 2, Group G locations. The 59 motors throughout the plant are the totally enclosed type except that the leg motors are of the synchronous type. The connected load required to operate the plant aggregates 1800 h.p. A small brick room adjacent to the workhouse encloses the electric switchboard.

Grain from the receiving pit of the truck dump house at the south end of the plant is carried by a 24 inch belt conveyor to a short leg outside the large storage bins, by which it is elevated and spouted to either of two belt conveyors in basement which carry it to the cleaner legs in the working house.

A new two story 27x33 feet office building of brick with concrete foundation stands apart. The first story houses a washroom with showers, lavatories and lockers for the workmen. The second story provides offices, and inspectors' rooms.

A complete system of telephones, speaking tubes and signals provides perfect communication between different parts of the plant.

The plant was designed and constructed by the John S. Metcalf Co., for the Chesapeake & Ohio R. R. and is operated under lease by Rosenbaum Bros.

The conveying machinery and marine leg were supplied by the J. B. Ehrsam & Sons Mfg. Co.; the synchronous motors, starters and breakers by the Westinghouse Electric & Mfg. Co.; the car dumper by the Link-Belt Co.; the scales by Fairbanks-Morse & Co.; the dock spouts, garner and scale valves by the R. R. Howell Co.; leg casings, drawoff hoppers, spouting and Calumet buckets for all legs by the Weller Metal Products Co.; dust collecting system by the Day Co.; induction motors by the Allis-Chalmers Mfg. Co. and drier by the Hess Warming & Ventilating Co.

Grain and Feed Trade News

Reports of new elevators, feed mills, improvements; changes in firms; fires, casualties, accidents and deaths are solicited.

ARKANSAS

Arkadelphia, Ark.—J. Lee Porter, Denham Wooten and T. J. Gentry, Jr., have filed articles of incorporation for the Arkadelphia Feed Mills, Inc. The authorized capital stock consists of 200 shares of n. p. v. and \$300 paid in capital.—J. H. G.

CALIFORNIA

Live Oak, Cal.—O. R. Powell and J. M. Hampton, Jr., owners of the Live Oak warehouse, are adding an annex which will house a steam barley roller, a seed treating machine and a grain cleaner.

Ramona, Cal.—F. H. Elliott has moved his feed store into his new building where the public is invited to call and inspect his enlarged, modern plant. Aside from carrying a large stock of San Diego Co-operative Poultry Ass'n feeds, Mr. Elliott will do grinding and milling of all kinds.

Sacramento, Cal.—The California Hay, Grain & Feed Dealers Ass'n enrolled a grand total of 28 new members during the past year, the membership chairman, Dewey B. Wells, of Tulare, reported at the Ass'n recent convention. The total membership numbers 427, I. J. Stromnes, sec'y, reports.

Petaluma, Cal.—The Taylor Milling Corp. is occupying its new plant and office, construction of which by the Hogenson Const. Co. has just been completed. The local company on Apr. 1 purchased the Todd Feed Co., located in the Todd district near Santa Rosa, and moved it here. Clyde Sanborn is manager of the Taylor Milling Corp.

Petaluma, Cal.—A new galvanized roof with 11 new trusses supporting has been built on the "sherry" building of the Poultry Producers. The 45x152 ft. building, years ago a part of the plant of Lachman & Jacobi, winery, will be used by the Poultry Producers for storage space, particularly for storing alfalfa. The roof was installed by the Hogenson Const. Co.

Oakland, Cal.—Excavation and piles contract for the 500,000-bu. storage addition and cleaning house for Albers Bros. Milling Co. has been let and pile-driving is now in progress. Plans and specifications for the remainder of the structure, covering concrete buildings and equipment, are being completed by Edward F. Carter, engineer, of Vancouver, B. C., and ready for calling bids about June 1.

Sacramento, Cal.—We are now engaged in our annual inspection of all the registered public grain warehouses. We are apprehensive as to the results, and anticipate that a larger tonnage will be condemned than was the case in 1939. We have had rather satisfactory co-operation from the majority of warehousemen, but the co-operation given by Nature has not been so helpful.—L. M. Jeffers, chief, Bureau of Field Crops.

Corcoran, Cal.—The Central Warehouse & Milling Co. has been incorporated, with Elmer C. Von Glahn, Frances Von Glahn and Wilna Roberts Ross as directors of what is a closed corporation, to do a general grain and warehousing business, and to engage in the milling of barley, wheat and corn and deal in grain and other farm products. An expansion of the Von Glahn warehousing business here is contemplated to include a general milling business.

CANADA

Fort William, Ont.—James McWilliam, employed in elevator work here for the past 28 years and recently a millwright at Elevator "D," died May 3 after a short illness.

Humberstone, Ont.—Robin Hood Flour Mills, Ltd., subsidiary of the International Milling Co., will install Zeleny Thermometer System thru-out its 133 tanks, interstice, outer and end bins. Carter-Halls-Aldinger Co. have the contract for erecting the large elevator now under construction here.

Winnipeg, Man.—A general meeting was held here on May 3, when an offer to buy the N. Bawlf Grain Co., Ltd., for \$1,000,000 made by the Alberta Pacific Grain Co., Ltd., was considered. H. E. Sellers is president of the latter company.

Winnipeg, Man.—Radio stations CJRC, Winnipeg, and CJRM, Regina, together with two short-wave stations, CJRO and CJRX, owned and operated by James Richardson & Sons, Ltd., have been acquired by the Armadale Corp. of Toronto.

Winnipeg, Man.—One of the first publications of the newly established agricultural department of the North-West Line Elevator Ass'n has been issued, disseminating information on climate influences on efficiency of crop production. More than 3,100 country elevators located at more than 1,600 points in western Canada are associated with the agricultural department of the Ass'n.

Winnipeg, Man.—Flight-Lieut. George Sellers of the R.C.A.F., a director of Melady-Sellers & Co., was honored by grain men Apr. 17 prior to his departure over seas. Following the regular trading session of the Grain Exchange, George S. Mathieson, president, called members together in the pit and presented him with a service watch on behalf of members of the exchange, extending to him the good wishes of the grain men.

Fort William, Ont.—Conferences between grain elevator operators and their employees, in an endeavor to reach an agreement on wage and working conditions, will be resumed at the Lakehead about May 14. Since rejection by the Brotherhood of Railway Clerks, with which the elevator employees are affiliated, of the award of a board of conciliation several months ago, efforts have been made by the men for a renewal of direct negotiations. The award granted some concessions to the men, but left wage rates the same.

COLORADO

Columbine, Colo.—Thieves ransacked the office of the Columbine Fuel & Feed Co. recently, and escaped with a number of checks and some pennies.

Holyoke, Colo.—Reiner-Smith Grain Co. is installing a new 20-ton Fairbanks Scale, with concrete deck, the W. H. Cramer Const. Co. doing the work.

Sterling, Colo.—R. A. Callier, sec'y of the Colorado Grain Dealers Ass'n, is now representing the Butler-Weish Grain Co. He was at one time located at Grand Island.

Wortmans (Climax p.o.), Colo.—The United Elevators, Inc., is putting in rope drives and made general repairs at its local elevator, the W. H. Cramer Const. Co. doing the work.

Hudson, Colo.—The United Elevators, Inc., has let a contract to the W. H. Cramer Const. Co. for repair of its elevator leg, installation of a Richardson Automatic Scale, and changing its direct spout.

Peetz, Colo.—The Farmers Co-operative has completed a new grinding plant with 6,000 bus. additional storage. A Fairbanks-Morse Grinder, feed mixer and 25-h.p. motor have been installed. Work was done by the W. H. Cramer Const. Co.

Keenesburg, Colo.—The United Elevators, Inc., recently built more feed bins at its elevator and added two small stands of elevators. New installations included an Allis-Chalmers Barley Roll and Corn Cracker; Calumet Buckets and new cup belting. The W. H. Cramer Const. Co. had the contract.

Roggen, Colo.—A large feed and barley rolling plant is being built here for the Farmers Grain & Bean Ass'n by the W. H. Cramer Const. Co. which will provide 40,000 bus. additional storage. Two large concrete molasses storage vats, a corn cracker, hammermill and mixer will be installed. The old and new plant will be motorized under R.E.A. Service.

ILLINOIS

Thomson, Ill.—Extensive alterations are being made at the Potter Bros. elevator here.

Greenville, Ill.—A. L. Junod is installing a 20-ton Fairbanks Scale with full capacity beam.

Maroa, Ill.—The Maroa Farmers Co-op. Ass'n will install a Fairbanks railroad type Motor Truck Scale.

Patoka, Ill.—The Patoka Farmers Co-operative Elevator Co. is building an elevator on the Illinois Central railroad right of way.

Green Oak (Princeton p.o.), Ill.—The Green Oak Elevator Co. will install a new head drive. George W. Quick & Sons will do the work.

Pesotum, Ill.—The Pesotum Elevator Co. has just completed the installation of a 20-ton Fairbanks railroad pattern Scale with a 9x34 ft. platform.

Champaign, Ill.—R. E. Rising of Sawyer & Rising, who retired last fall and went to Florida on account of ill health, has returned much improved.

Savoy, Ill.—The Savoy Grain & Coal Co. is building a warehouse apart from its elevator for handling coal, feed and hardware. A furnace will supply heat.

Crandall (Morton p.o.), Ill.—The Farmers Grain & Coal Ass'n of Morton on the A. T. & S. F. R. R. has been razed due to truck and river competition.

Ashton, Ill.—The J. M. Bergeson Grain Co. recently installed a modern screw conveyor system complete with direct motor drive, supplied by R. R. Howell Co.

Metcalfe, Ill.—The B. & O. elevator of the Cleveland Grain Co. was destroyed by fire of unknown cause May 3. The company operates two other elevators at the same station.

Peoria, Ill.—The Illinois Farmers Grain Dealers Ass'n will hold its annual convention here next February, it was decided at a board of directors meeting Apr. 16 in Bloomington.

Hutsonville, Ill.—The J. A. Boyle Roller Mills elevator was destroyed by fire the night of Apr. 29, that originated in the basement of the building. The loss was partially covered by insurance.

Danforth, Ill.—Timely discovery of a fire in the large oats storage bins at the Farmers Elevator Co. elevator Apr. 8, prevented what might have been a disastrous fire. As it was, damage was slight.

Decatur, Ill.—Spencer Kellogg & Sons, Inc., are installing Zeleny Thermometers in their 42 tanks now under construction at their new elevator here for which Jones-Hettelsater Const. Co. has the contract.

Kankakee, Ill.—Henry Leavitt, co-owner of the Laird Grain Co., has bot out his partner, Frederick Swannell, Jr., and will operate the business under the name of Leavitt Grain Co. with office and elevator on West Seneca St.

Sumner, Ill.—Roscoe D. Cunningham, 55, well known feed and grain merchant, died in a hospital in Olney. His death was due to burns received in the explosion of a stove, when he attempted to light it with kerosene.—W. B. C.

Hudson, Ill.—The Hudson Grain Co. is equipping its elevator with new Atlas Leg Belts and Calumet Cups; also is putting all new roller bearings on the heads and line drives. Jess Provine has the contract. Dale Bunney is manager of the elevator.

Clinton, Ill.—E. R. Duncan, 46, manager of the M. L. Vehon Grain Co., was found hanging from a steam pipe in the company office at 7 a. m., April 27. He had been employed by the company for eight years and was transferred here from the Sullivan office 1½ years ago.

Brocton, Ill.—Albert Rodgers, local trucker and grain dealer, will build an elevator along the right-of-way of the Nickel Plate railroad in the north part of Brocton. The elevator will have no storage capacity except the dumps, grain to be loaded out immediately after being received.

Charleston, Ill.—A. J. Daily has entered the employ of Whalen Bros. in charge of the feed department at the elevator. He was stationed with the Paul Kuhn Co. at Ashmore for a number of years, and was engaged as manager of the Farmers Elevator there, also, which he assisted in organizing.

Astoria, Ill.—The Bader Grain Co. is conducting a pig feeding test. Three pigs out of one litter and as near a size as could be, weighing 60 lbs. each, have been selected and placed in separate pens. A different feed is being given each and will be continued for 80 days at the end of which time a check up will be made and announced. The public is invited to follow the feeding tests. Myron Shaw is manager of the elevator.

Dallas City, Ill.—The Dallas City Grain & Feed Co. started its first big river barge shipment of corn for marketing via waterway the week of Apr. 16. Work is now going on at grading and placing outside buildings on foundations at the new river elevator. Seth McClintock is local manager of the elevator.

Baker (Leland p.o.), Ill.—The Farmers Elvtr. Co. has let a contract to George Saathoff for a complete over hauling of its elevator. Electric motors with individual drives will replace the gasoline engine and a new leg with Calumet Cups will be installed; a Blue Streak Hammer-mill will be added and steel siding will be re-mailed and painted.

Danville, Ill.—Horace P. Worden, 75, died at his home here Apr. 17. Mr. Worden, who retired about five years ago, came to Danville in 1918 from Fairmont where he had been in the elevator business since 1912. Later he owned and operated an elevator at Tab, Ind. He had resided in this community over 55 years, making his home at State Line, Ind., prior to moving to Fairmont.

Cullom, Ill.—John L. Shearer, 85, one of the best known pioneer grain dealers in this part of Illinois, died at his home Apr. 16, of a heart ailment. Mr. Shearer entered the grain business here in 1884 in the employ of Searing & Dorsey, a business that became his chief interest the rest of his life. After several years with this company he bot out the interest of James Dorsey, in the firm, which became Searing & Shearer. In 1888, Elmer Shearer, a cousin, entered the business, and later bot the interest of A. B. Searing. The company then as Shearer & Shearer, becoming one of the best known grain businesses in the state. During the height of its career, Shearer & Shearer owned elevator properties at Cullom, head office, Fairbury, Weston, Kempton, Sibley, Saybrook, Steward and Scarborough, and handled as high as 5,000,000 bus. of grain per year. The outside properties were gradually disposed of and in 1919 Shearer & Shearer sold the local plant to the Cullom Co-operative Grain Co., which continues the business. The firm of Shearer & Shearer since has retained its identity as an investment firm.

CHICAGO NOTES

Ned McDonald Freeman, 67, a former member of the Board of Trade, died of a cerebral hemorrhage Apr. 24 in his home in Zion. Mr. Freeman retired from the brokerage business in 1930.

CASH GRAIN Marketing Course

The Grain Exchange Institute is pleased to announce a special offering of its correspondence course, "Grain and Its Marketing", with emphasis on the problems of marketing grain at country points. The group will be composed exclusively of country elevator managers, officers and employees, so that our instructors can deal with typical country elevator problems in connection with the cash handling of grain from the farm to the ultimate consumer.

Write for further particulars, Grain Exchange Institute, Board of Trade, Chicago, Ill. (A non-profit organization.)

Benjamin W. Davis died Apr. 23. He was a member of the Board of Trade since 1930.

Albert Schwill & Co. is asking for bids on the construction of a reinforced concrete storage annex of 500,000 bus. capacity to its elevator in South Chicago. A. F. Eiserer made the plans and specifications.

Transfers of Chicago Board of Trade memberships were made at \$1,850, an advance of \$150. Posted offers of membership certificates were at \$1,875, and price of membership certificates on the highest bid was \$1,500.

Holders of some of the bonds on the Board of Trade building have voluntarily reduced their rate of interest, saving \$114,300 in interest charges for the year ending Dec. 15, 1940, and about \$28,000 a year thereafter.

The following have been elected to membership in the Board of Trade: Arthur J. Feicht, Chicago; Olof B. Fridman, Hateley Bros., Chicago; Thos. F. Staley, Jr., Reynolds & Co., New York, N. Y.; Donald B. Long, Pillsbury Flour Mills, Co., Chicago; Chas. W. Buckley, II, Buckley & Co., Chicago; Milton Mai, New York, N. Y.; James B. Mullen, Bennett Weisberger, James W. McCulloh, Jr., Chicago; James M. Hutton, W. E. Hutton & Co., Cincinnati, O.; R. M. Knox, Box 803, Marysville, Mich.; Kurtis R. Froedtert, Froedtert Grain & Malting Co., Inc., Milwaukee, Wis.; Hudson Leathers, Marshall Geer & Co., New York, N. Y.

On recommendation of the Warehouse Com'te, the directors of the Board of Trade recently amended Regulation No. 1829 to read as follows: "1829. In compliance with Section 5a, sub-paragraph (7) of the Commodity Exchange Act, receipts for grain stored in the following grain elevators licensed under the United States Warehouse Act of August 11, 1916, as amended will be deliverable in satisfaction of futures contracts: Wabash Elvtr. operated by Norris Grain Co., Chicago & Northwestern Terminal Elvtr. & Annex operated by Cargill, Inc., Rock Island Terminal Elvtr., C and D operated by Continental Grain Co., National Elvtr. and Calumet Elvtr. operated by Rosenbaum Brothers, Inc., and Santa Fe Elvtr. operated by Santa Fe Elvtr. Corporation."

INDIANA

Bedford, Ind.—The Robertson Mill has installed a Blue Streak Twin Spiral Mixer.

Burnettsville, Ind.—Burnettsville Elvtr. Co. has installed a Kelly Duplex Corn Cutter and Grader with motor drive.

Deedsville, Ind.—See & Son, whose feed store was destroyed by fire recently, will rebuild adjoining the elevator east of the railroad.

Warren, Ind.—Salamonie Mills recently purchased a new style revolving screen cleaner which is being made by the Sidney Grain Machinery Co.

College Corner (College Corner, O., p.o.), Ind.—The Fred Miller elevator has been sold to the College Corner Lumber Co. who assumed ownership May 1.

Montpelier, Ind.—Hoosier Grain & Supply Co. recently purchased a large receiving separator with motor and drive thru the Sidney Grain Machinery Co.

LaGrange, Ind.—R. V. Beaty has succeeded I. P. Lloyd as manager of the local Farm Buro Elevator. Mr. Lloyd has located in Jackson, Mich.—A.E.L.

Columbia City, Ind.—Frank O. Feagler has resigned as head miller at the Farmers Mill & Elvtr. Co. after 19 years employment there, because of ill health.

Indianapolis, Ind.—Dr. L. W. Kirtley, who is president and director of three grain elevators, is candidate for state representative for Marion County on the G.O.P. ticket.

Union Center (Kingsbury R.F.D.), Ind.—Albert Hoepfner recently built a new addition to his elevator here, and the hammer mill and mixer and feed mill equipment has been shifted to this new location.—A.E.L.

Lawrenceburg, Ind.—W. H. Bowman, for the last three years sales manager of the Ismert-Hincke Milling Co., Kansas City, has been appointed vice-pres. and sales manager of the Lawrenceburg Roller Mills Co.

Mt. Vernon, Ind.—Purchase by Marvin Cooper and wife from the Simpson Lumber Co. of real estate occupied by the Mt. Vernon Feed & Seed Co. is announced. Mr. Cooper is manager of the feed and seed firm.—W. B. C.

Boone Grove, Ind.—The Boone Grove Grain Co. is building an addition to its elevator. C. S. Weiler is manager of the plant.

Mt. Vernon, Ind.—Burchard C. Ashworth, for ten years a leader in the Farm Buro Co-operative movement in Posey County, has resigned as county manager of the Posey County Farm Buro to engage in other business.—W. B. C.

Valparaiso, Ind.—The Pennsy Elevator, owned by the Brown Supply Co., Inc., is being equipped with a new sheller and hammer mill, new drags and all new power thru which this plant will be able to render a complete service.—A.E.L.

Anderson, Ind.—Station WHBU will broadcast the grain quotations at 8:35, 9:35, 10:35, 11:35 a.m., 12:35 p.m. and the close at 1:35 p.m. This is the daily schedule. On Saturday the hours will be 8:35, 10:35 and 11:35 a.m. (Central Standard Time).

Rushville, Ind.—The Rush County Alfalfa Dehydrating Co. has been incorporated and will establish a plant either here or near the city at once. Edward S. Frazee is president of the company; Roy Swain, vice-pres., and Fred Goddard, sec'y-treas.

Peabody (Columbia City R.F.D.), Ind.—Remodeling has begun on the Peabody Co-operative Co. elevator, where the driveway is being lowered and new drag and sheller and power wiring is proceeding under the supervision of Carl Vangundy.—A.E.L.

Rockfield, Ind.—The Rockfield Co-operative Elvtr. has enlarged its office and built a show and sales room. The company is selling chicks and reports a good increase in sales of chicken feeds and small items. It expects to add several more items to its line of stock.

Indianapolis, Ind.—New members recently enrolled by the Indiana Grain Dealers Ass'n include the Wilkinson Grain Co., Wilkinson; Wheatland Grain Co., Wheatland; Graham Grain Co., Terre Haute and three additional stations; John L. Cruea, Crawfordsville; Hubert Jackley, Rockfield.—Fred K. Sale, Sec'y.

Warsaw, Ind.—The Palestine Mill, located at Palestine Lake six miles southwest of here, resumed operations in April with an entire week devoted to inspection of the new plant by the public. The present mill replaces the one that was destroyed by fire some time ago. The mill is equipped with a hammermill, twin spiral mixer and corn cutter in its processing department.

IOWA

Callender, Ia.—The Callender Grain Co. has been incorporated.

Emmetsburg, Ia.—The Kerber Feed Mill will install a new improved oat huller.

Lohrville, Ia.—The Babcock Milling Co. is erecting a feed warehouse at the rear of the mill building.

Shellsburg, Ia.—The Shellsburg Grain & Lumber Co. recently completed its fine, new office building adjoining its elevator.

Macedonia, Ia.—The Macedonia Grain & Lumber Co. recently filed for renewal of its articles of incorporation for twenty years.

Nora Springs, Ia.—Charles Dinsmore, for 22 years manager of the Farmers Elvtr. & Supply Co., resigned that position, effective in July.

New Hartford, Ia.—The New Hartford Elvtr. Co. recently installed a Kelly Duplex Vertical Feed Mixer, one ton capacity, with motor drive.

LIBERTY GRAIN BLOWERS

fill cars to capacity without inside scooping in 1½ to 2 hours. Saves expense of scooping labor, and loads more cars per day. Easily moved from place to place. The only thing for loading cars on R.R. spurs. Write for particulars.

Midwest Steel Products Co.
728 X Delaware, Kansas City, Mo.

MIDWEST GRAIN BINS

answers your surplus storage problems. 5 sizes, 500 to 2250 Bu. Easy to move or erect. Extra profit also selling bins to your farmer customers who require farm storage. Also steel Corn Crib. Write for particulars.

Midwest Steel Products Co.
728 X Delaware, Kansas City, Mo.



Riverside, Ia.—The Riverside elevator owned by the late William Griffin is being taken down. The elevator had not been operated for many years.

Mallard, Ia.—The Federal-North Iowa Grain Co. is installing a Howell direct connected geared head drive with 7½ h.p. Fairbanks-Morse Motor.

Akron, Ia.—The Farmers Grain Co. has been reorganized, to operate after May 1, 1940, as a strictly co-operative concern known as the Farmers Co-operative.

Des Moines, Ia.—Donald Watson, who has been employed as a salesman for the Inland Milling Co., is now assistant manager in the office of the company.

Meservey, Ia.—George Ellsworth Thomas, 65, retired elevator operator, died of a heart attack in the garage at his home Apr. 29, while working on his automobile.

Ryan, Ia.—R. T. Anderson, formerly of Bernard, was appointed manager of the St. Anthony & Dakota Lbr. Co. here.—Art Torkelson, with Lamson Bros. & Co.

Charter Oak, Ia.—Thieves forced the safe lock in the Farmers Co-operative Grain Co. elevators' office the night of Apr. 20 and escaped with a small amount of change.

Ashton, Ia.—The Farmers Elvtr. Co. has equipped its elevator legs with new Strong-Scott Drives and G.E. Motors, the T. E. Ibberson Co. making the installations.

Sioux City, Ia.—Carrie Swanson, who has been an accountant for the Flanley Grain Co., will launch her ship on the sea of matrimony May 30th. The lucky man is Wilbur Austin.—A. G. T.

Whittemore, Ia.—The annual Elevator-Creamery picnic date has been set for June 20. Plans for the celebration are complete and all patrons and members of their families are invited to attend.

Des Moines, Ia.—New members recently enrolled by the Western Grain & Feed Ass'n are Farmers Grain Co., Scotch Grove; Enterprise Grain Co., Elkhart, Ia.; and Swift & Co., Des Moines.

Des Moines, Ia.—J. T. Sharp, 80, has retired as president of the Mill Owners Mutual Fire Insurance Co. of Iowa, after 56 years of active service with the company. H. B. Carson, sec'y, has succeeded him.

Des Moines, Ia.—Spencer Kellogg & Sons, Inc., are installing Zeleny Thermometers in the 14 tanks and 7 interstice bins of their new elevator now under course of construction by the James Stewart Corp.

Westfield, Ia.—Owing to lack of business the J. J. Mullaney & Sons Co. elevator here will discontinue operations. Nels Beaubien, who has been manager for a number of years, stated he has no definite plans for the future.

New Sharon, Ia.—Andy Loomis, owner of the Loomis elevator, staged his third annual fish fry, Apr. 18, in the Methodist church, when more than 200 farmers attended and also heard a lecture by Dr. E. E. Clove, livestock authority.—L. A. G.

Fort Dodge, Ia.—J. E. Vickerman has accepted a position with the Christensen Grain Co. as assistant manager and bookkeeper. Mr. Vickerman, better known as "Vic" to his many friends, was formerly with the Iowa Co-op. Grain Co. here, and later manager of the Farmers Savings Bank at Plymouth, Ia., a position he held until accepting the local position. He was anxious to get back in the grain line, and now feels right at home.

George, Ia.—The Farmers Elvtr. Co. has awarded contract to the T. E. Ibberson Co. for the erection of a complete elevator, large warehouse, double driveway, and office building, along with a feed mill building with all its equipment which includes a Strong-Scott Attrition Mill with 2-30 h.p. motors; a Marion Mixer Unit, and a corn cracker unit. Two legs and a number of processing bins will be provided. The elevator replaces the one that burned Apr. 3.

Rembrandt, Ia.—The Farmers Elvtr. Co. is installing a new 30-ton scale at its elevator. A three room office will be built and a new feed mixer installed. Ralph Dailey is local manager. Cargill, Inc., is owner of the local elevator.

Edna, Ia.—Wm. H. Steinbruch, who has been agent for the Quaker Oats Co. at this point for the past eleven years, has resigned and has accepted a position with the First State Bank of Webster City, where he will assume his new duties May 15.

Eldora, Ia.—The Farmers Elvtr. Co. filed suit against Ralph Seelemeier for a judgment of \$37.38 obtained in April, 1932. The company charged that property had purpoely been deeded to Bessie L. Jacobsen in order to escape the judgment.—L. A. G.

Audubon, Ia.—Paul Martin of Greenfield has leased the Audubon Milling Co. plant, idle for some time, from the D & R Oil Co. and is operating it with the assistance of Stanley Mathiesen. Mr. Martin has had 10 years of experience in the feed business at Greenfield. He is handling a complete line of feeds.

Spencer, Ia.—Elevator men from Ruthven, Terrill, Ayrshire, Peterson and Lake Park were present for the second discussion on proposed plans for establishing a soybean plant here, the meeting held here Apr. 18. No definite action was taken but the proposition is under advisement by many persons interested in the project.

Hawarden, Ia.—Included in equipment installed in the new Lambertson estate elevator, nearing completion, is a Howell Direct Connected Geared Head Drive with Fairbanks-Morse Motor, Howell Distributor and Bin Spouting, Calumet Cups and Electric Overhead Truck Lift. The 20,000-bu. cribbed iron clad elevator has 10 bins. The elevator leg is driven by a 5 h.p. G. E. Motor and grain is dumped by a Howell Truck Dump. Tillotson Const. Co. has the contract.

Rock Rapids, Ia.—The Quaker Oats Co. has awarded contract to the T. E. Ibberson Co. for immediate construction of a building containing a 30,000-bu. grain elevator, feed mill, warehouse, salesroom and office, the mill to be equipped with modern machinery to make poultry, cattle and hog feed from locally purchased grain. The plant will be operated with electric power and a steam heating plant will be installed for heating the salesroom, office and mill. Large driveways will be provided for receiving grain and serving the mill.

Buckeye, Ia.—The Farmers Elvtr. Co. plant was destroyed by fire of unknown origin Apr. 30, with an estimated loss of \$25,000, which included 7,000 bus. of grain, mostly oats. A new addition to the building had just been completed the week before. The plant was a total loss.—A. G. T.—Rebuilding will start at once, the company having let a contract to the T. E. Ibberson Co. for erection of a 30,000-bu. elevator, of iron clad construction on a slab foundation. A 20-ton receiving scale and an automatic shipping scale will be installed. A large two-room office will be a feature of the new structure.

KANSAS

Topeka, Kan.—Ismert-Hincke Milling Co. had an electrical breakdown loss on April 26.

Lindsborg, Kan.—The Missouri Pacific has improved one spur and built another to the Lindsborg Mill & Elvtr. Co.

Coffeyville, Kan.—The Moore-Lowry Flour Mills Co. sustained a severe electrical damage loss at its plant on Apr. 10.

Wichita, Kan.—The Yancey Grain & Elvtr. Co.'s scale deck was damaged Apr. 13 when a customer's truck broke thru it.

Wellington, Kan.—The Hunter Mill has postponed until next year the proposed construction of the 275,000-bu. addition to its "A" plant.

Rozel, Kan.—The George Gano Grain Co. is enlarging its local elevator and raising it 17 ft. Ernest E. Smith is manager of the elevator.

Larned, Kan.—The Bowen Milling Co. suffered a loss recently when the large motor at the mill was burned out, necessitating its being re-wound.

Hutchinson, Kan.—An explosion in the vault of the Consolidated Flour Mills Co. mill on Apr. 14 did considerable damage. The blast occurred when a match was lighted. Its cause is unexplained. U. H. Scofield, manager, was painfully but not seriously injured by the blast and fire that followed.

Haven, Kan.—The 100,000-bu. storage elevator now under construction for the Farmers Co-operative Grain Co. will be finished by June 1.

Radium, Kan.—The Radium Co-operative Co. is building an additional 20,000-bu. storage to its present frame ironclad elevator, increasing its total storage capacity to 36,000 bus.

Bushton, Kan.—The Bushton Grain & Supply Co. is repairing the former roller mill building which it purchased a few months ago, converting it into bins to be used for grain storage.

Wichita, Kan.—The Wichita Flour Mills Co. has let the contract for construction of its 250,000-bu. addition with a head house to the Bushman Const. Co. Horner & Wyatt are the engineers.

Inman, Kan.—The Friesen Grain Co. has installed a new feed grinder and mixer, equipping its elevator to grind and mix its own feeds and specialize in custom grinding. John Friesen is manager.

Bayneville (Clearwater p.o.), Kan.—The Farmers elevator operating under lease to the Kansas Mlg. Co., was destroyed by fire Apr. 26. Lightning was given as the cause, tho the house was rodded.

Salina, Kan.—The grain grading school to have been held here on May 29 will be on May 31 instead, Willis B. Combs, senior marketing specialist of the Grain and Seed Division, A. M. S., has announced.

Washington, Kan.—The Kiger Grain Co. has let a contract to the A. F. Roberts Construction Co. for the erection of a 11,000 bus. stud type grain elevator with office and 22x9 ft. Fairbanks Scale attached.

Windstorms in Kansas recently caused damage at the following plants: Walnut Creek Milling Co., Great Bend; W. P. Moran Elvtr., Hargrave; Consolidated Flour Mills Elvtr., Hodges; Salina Terminal Elvtr. Co., Hays.

Bonner Springs, Kan.—Alva R. McAdoo, 74, widely known grain dealer and elevator operator, died at his home in Kansas City, Mo., Apr. 20, following a long illness. In 1918 he organized the Tiblow Milling Co., and in 1925 was elected mayor.

Chanute, Kan.—The Wickard Grain Co. is constructing a brick and tile office building. During building operations the company has moved south of its former site. The new building is 50 x 30 ft., much larger than the former frame structure.

Phillipsburg, Kan.—The Phillips County Grain Co.'s new warehouse has been completed and feed grinding equipment has been installed. The company will prepare and mix its own commercial feeds, but will handle a standard line in addition. Custom grinding and mixing will be a specialty.

Ottawa, Kan.—The Farmers Co-operative Co. is building two large storage units at its elevator. One, a warehouse, is 60x24 ft., and 20 ft. high; the other, a 15,000-bu. grain storage bin, is 20x24 ft., and 24 ft. high. Both structures are set on foundations seven feet above ground level which puts them above level of flood waters.

Arkansas City, Kan.—The grain grading school announced for May 31 will be held here on May 29 instead. Willis B. Combs, senior marketing specialist, explained early information regarding these schools is announced as a tentative schedule.

Sylvia, Kan.—The Midwest Grain Co.'s mill, recently destroyed by fire, is being rebuilt. The new building will be two stories high and 12 ft. longer than the building that burned. G. D. Estes, firm president, stated the old elevator will be torn down after harvest and replaced with a new modern concrete structure. The Miller Const. Co. has the contract for rebuilding the mill.

CLELAND Grain Cleaners

will do the cleaning job you need, for clean wheat, oats, corn, barley, rye, beans, flax and seeds, with ONE cleaner.

Largest Capacity Lowest Price
Write for full information about these Modern Cleaners.

Cleland Mfg. Co.

Established 1824 Minneapolis, Minn.

Scouler-Bishop Grain Co.

GRAIN MERCHANTS

KANSAS CITY WICHITA OMAHA

Morganville, Kan.—The Gordon Mark Elvtr., formerly owned and operated by the Stoneback Grain Co. and now owned by Gordon Mark, is being repaired from one end to the other. All old machinery is being replaced with new, modern equipment. The old Miller elevator was purchased recently and will be used for storage. L. B. Allen is manager of the plant.

KENTUCKY

Hanson, Ky.—The Hanson Milling Co.'s plant was totally destroyed by fire on Apr. 28.

Paris, Ky.—The firm of Woodford Spears & Sons has filed suit in Franklin Circuit court for refund of \$98 in chain store taxes for the years 1934-38 inclusive, which it claims the revenue department refused to return when the taxing act was declared unconstitutional. On Apr. 11, the milling concern's petition said, the revenue department returned \$27, the amount paid for the fiscal year 1938-39, but "refused" to pay the the remaining \$98.

LOUISIANA

Lake Charles, La.—Jacob C. Eisenman, 87, former feed dealer and grocer, died Apr. 14.

MICHIGAN

Reading, Mich.—Herb McClellan opened the Reading Mill Apr. 12, and will grind and mix feeds.

Bad Axe, Mich.—The Bad Axe Grain Co. sustained a small loss at its plant recently, caused by high winds.

Grand Blanc, Mich.—Charles and Lee Griggs recently purchased a new corn sheller to be installed in the mill.

Belleville, Mich.—The Belleville Milling Co. sustained a small loss at its plant recently, caused by high winds.

Clare, Mich.—The Johnson Elevator recently installed a seed grain treater for treating seed grain for smut control.

Springport, Mich.—The Springport Elevator has installed a Kelly Duplex Corn Cutter and Grader with motor drive.

Chelsea, Mich.—The Chelsea Milling Co. is constructing a 55x95 ft. warehouse, of cement block construction, two stories high.

Chesaning, Mich.—The Chesaning Farmers Elvtr. Co. reported a small loss incurred at its elevator as a result of recent high winds.

Bay City, Mich.—The Wolverine Bean Co. recently installed a seed grain treater for treating farmers' seed grain for smut control.

Blissfield, Mich.—Fire caused a small loss at the Blissfield Co-operative Co. on Apr. 18, when a truck ran into a telephone pole, throwing a tank of gasoline near the building, where it caught fire.

Henderson, Mich.—The Michigan Bean Co. held the formal opening of its local elevator Saturday, May 4. The plant, completely rebuilt, is 158 ft. over all and all machinery is new. Neil Morman is manager.

Reading, Mich.—Adelbert E. Hakes, manager for 25 years of the Reading Co-operative Commerce Co. and one of its founders, retired Apr. 13. The company deals in grain, coal, feeds, seeds, fence, tile, lime, fertilizer and livestock. Lloyd Redding, who has been employed by the company for the last 17 years, has been made manager to succeed him.

Lum, Mich.—George Wendling of Burnside township, recently bot the Lamb grain elevator here, and is taking it down, to rebuild it on his farm where he will handle his own crops and clean his own seed and grain.

Lawton, Mich.—E. Beam & Son are giving their mill a general overhauling. Partitions have been removed; individual motors have been installed; new machines have been added, including a hammermill, cob crusher, and corn sheller.

Blanchard, Mich.—The Michigan Bean Co. has installed a new signal system at its elevator, a twinphone which enables the office to contact all parts of the elevator and converse with the men at these stations in a two-way conversation, thus enabling Mgr. Sylvester Yager to attend to office detail work and at the same time keep in direct touch with various departments of the plant. The new device saves both his and other employees' time.

MINNESOTA

St. James, Minn.—The Grain Products Co. will erect a warehouse and feed mixing plant.

Nassau, Minn.—A truck rolling off the pneumatic dump at the Nassau Farmers Elvtr. Co. elevator recently damaged the guard.

Evan, Minn.—Hixon-Gannon Co., Inc.'s new elevator has been completed. Jack Jorgensen is manager of the company's local houses.

Sleepy Eye, Minn.—A new 30-ton 28 ft. Howe Scale and Strong-Scott dumps will be installed for the Eagle Roller Mill Co. by the T. E. Ibberson Co.

Kasson, Minn.—The Kasson Grain Co. is installing a Howell Perfection Pneumatic Blower System complete with motor, piping, feed collector, etc.

Blooming Prairie, Minn.—The Blooming Prairie Farmers Co-operative Elvtr. Ass'n will construct a soybean processing plant here to be operated as a co-operative enterprise.

Princeton, Minn.—Peter J. Wikeen, 84, died at his home in Minneapolis on May 3. He operated a grain elevator here for 34 years before moving to Minneapolis eight years ago.

Hancock, Minn.—A new Strong-Scott one-ton horizontal mixer, motor driven, will be installed on the workfloor for W. L. Johnson & Son. The T. E. Ibberson Co. has the contract.

Hutchinson, Minn.—The Pacific Grain Co. has installed a Strong-Scott Feed Dresser, a Winona Attrition Mill Reel and a Prater Pulverizer at its local plant. The T. E. Ibberson Co. did the work.

Butterfield, Minn.—The Hubbard & Palmer Co. elevator was so buffeted by high winds recently, that the building was twisted on its foundation, loosening two corners and spilling corn onto the ground.

Good Thunder, Minn.—The Good Thunder Elvtr. Co. is remodeling its plant. New equipment being installed includes Howell bin spouting, Atlas Rubber Covered Bucket Belting and Calumet Cups.

Hardwick, Minn.—Sixteen thousand bushels of sealed corn were spread out over about an acre of ground when a wall of the E. A. Brown elevator burst recently. Dale Jacobs is manager of the elevator.

Renville, Minn.—The Pacific Grain Co. will remodel its local elevator and construct a warehouse, office, and new driveway in which a 20-ton Howe Scale will be installed. Contract for the work has been let to the T. E. Ibberson Co.

Mt. Lake, Minn.—Improvements are being made to the grain handling machinery of the east elevator of the Co-operative Farmers Co. plant. New grain belts are being installed and new power equipment and new spouts put in the elevator.

Minneapolis, Minn.—Harold R. Ward, of Mound, vice-pres. of the Russell-Miller Milling Co., has retired from active management with the company after 29 years of service. He will continue as a member of the board of directors of the milling concern.

Warroad, Minn.—The Landby Dehydrating Co. recently incorporated, will construct a plant here. Former State Senator A. M. Landby of Swift, is president of the company; other incorporators are J. W. Taylor, Roseau, vice-pres.; Colburn Hvidsten, Grand Forks, N. D., sec'y-treas.; A. J. and Martin Landby, of Swift, and Lewis Landby, G. J. Erickson and Martin Erickson of Warroad.

Lake Park, Minn.—The Lake Region Grain Men's Ass'n met here the evening of Apr. 16 in the village hall. C. M. Kelehan delivered the evening's address, Mayor L. H. Nelson giving an address of welcome to the fifty elevator managers of this area who attended.

Wykoff, Minn.—Walter Meyer will rebuild his mill, destroyed by fire Apr. 13. It is believed defective wiring caused the fire which caused a loss of the building, machinery valued at \$3,000 and a quantity of feed. A new mixer, installed only two months ago, was destroyed.

Barry, Minn.—The Ray Lang Grain & Seed Co. elevator, destroyed by fire Apr. 18, along with about 20,000 bus. of grain it contained, will be rebuilt at once. The debris has been cleared away and the damaged grain disposed of. John Robertson is manager of the elevator.

Minneapolis, Minn.—The Bunge Elvtr. Corp., which has been taking bids for construction of a 600,000-bu. grain storage elevator to be erected here, will decide whether or not to go ahead with its building plans about May 6. The elevator considered is of reinforced concrete construction.

St. Vincent, Minn.—The St. Vincent Elvtr. Co. has placed an order with R. R. Howell Co. for a Fairbanks-Morse industrial power unit for its plant. The new engine will have electric starting equipment, and will be connected to the main power line with V-belt drive, all mounted in roller bearings.

Willow River, Minn.—John J. Miller has purchased the Frank H. Inman feed store and warehouse and is planning to install feed mixing and grinding equipment. He was for 11 years manager of the Farmers Co-op. Ass'n at Barnum and for a year with the Apple River Milling Co. at Duluth.

Montevideo, Minn.—The Pacific Grain Co. has let the contract for construction of its two-story warehouse to the T. E. Ibberson Co. The new structure will be used for the storage of feeds to be manufactured here. Elevating equipment for sacked products will be installed in the building, which will serve the upper warehouse floor from cars.

Red Wing, Minn.—Plans have been drawn by Leck Const. Co. for a storage addition to the linseed oil plant of the Pittsburgh Plate Glass Co., to consist of four cylindrical concrete bins, one star bin and two pocket bins, one of which will be used for storage and the other for an elevator leg and stairway. The bins will be 24 ft. in diameter and 112 ft. high.

St. James, Minn.—The Southern Elvtr. Managers Ass'n met here Apr. 23, when a lively discussion of railroad versus trucking rates as they affect the grain industry featured the evening's program. Several representatives of railroads were present and replied to queries directed to them from the floor. Others on the program were Dr. Gustave Eckstrom, astrological forecaster for the Minneapolis Star-Journal; a representative of the Mankato Soybean Co., Mankato, Minn.; Mr. Boyd of the Omaha Railroad; W. D. Flemming.

Minneapolis, Minn.—Effective Apr. 29, when grain and other markets began opening and closing under Daylight Saving Schedule, Minneapolis Grain Market Quotations are being broadcast as follows: WCCO, daily, 10:00 a.m.—Flash Quotations of Active Futures; Saturday, 10:00 a.m.; daily, 11:00 a.m.—Same; Saturday, 11:00 a.m.; daily 12:30 p.m.—Cedric Adams' Digest of Closing Quotations, and Grain Bulletin Changes. Daily, 4:10 p.m.—Complete Closing Quotations, with Grain Bulletin Changes; Saturday, 11:50 a.m. W.D.G.Y., daily 12:30 p.m.—Complete Closing Quotations and Grain Bulletin Changes; Saturday, 11:15 a.m. Other Northwest radio market reports: WDAY, Fargo, N. D.—9:00 a.m.—Opening; 10:00 a.m.—Current Futures; 12:55 p.m.—Close and G. B. Changes; 11:55 a.m.—(Sat.) Close and G. B. Changes. KFJR, Bismarck, N. D.—9:00 a.m.—Opening; 10:00 a.m.—Current Futures 11:15 a.m.—Same; 2:20 p.m.—Close and G. B. Changes; 11:30 a.m.—(Sat.) Close and G. B. Changes.

SOFT WINTER WHEAT RED — WHITE — MIXED

Red is mostly Ohio

White and Mixed is mostly Michigan

TOLEDO OFFICIAL INSPECTION
AND WEIGHTS, except some Toledo
or Detroit Inspection, Destination
Weights

LANSING GRAIN COMPANY
LANSING, MICH.

Official Brown-Duvel MOISTURE TESTERS

Tag Heppenstall Moisture Meters

and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.

HARRY B. OLSON 211 W. Wacker Drive
CHICAGO, ILL.

DULUTH LETTER

Frank B. Mitchell, of the Atwood Larson Co., has been admitted to Board of Trade membership.—F. G. C.

Charles D. Ross, 67, director of the Consolidated Elvtr. Co., died at his home at New Brunswick, N. J., on Apr. 29.

The National Labor Relations Board has announced that a complaint has been issued against the Bob White Mills, Inc., accusing it of discharging an employee because of union activity.

Edmund P. Pillsbury, Minneapolis, with Pillsbury Flour Mills Co., made application for transfer of Board of Trade membership standing in the name of Fletcher Chamberlain to himself and will be stationed here as wheat buyer for the company. Mr. Chamberlain has been transferred to the firm's Spokane, Wash., office.—F. G. C.

Only a small number of boats have arrived in this port so far in the navigating season but vesselmen aver that a more active movement will be on soon. About 10,000,000 bus. of grain will start loading on May contracts. Boat charter to load wheat during May has been reported made at $2\frac{1}{2}$ c Buffalo delivery, but with any surplus of boats there is likely to be a shading in the rate. Eastern demand for grain is not very active. Heavy grain receipts featured in the last week of April, as the country unburdened itself of stocks, to take advantage of the high prices prevailing.—F. G. C.

MISSOURI

Memphis, Mo.—Craig Bros. recently installed a Kelly Duplex Model L Hammer Mill.

Troy, Mo.—John Clare is the new manager at the Farmers Elvtr. Supply Co. elevator.

Edina, Mo.—Wayne Hayden has purchased the grain elevator and feed store of Cornelius & Son.

Higginsville, Mo.—The M. F. A. Co-operative Ass'n recently sustained an electrical damage loss.

Braymer, Mo.—A new feed grinder, equipped with magnetic separator, has been installed at the Mott mill.

Concordia, Mo.—The Farmers Elvtr. Ass'n is overhauling its elevator and installing a new leg, a Fairbanks-Morse Engine and a new distributor. Tillotson Const. Co. is doing the work.

Columbia, Mo.—The Boone County Milling & Elvtr. Co. has been enrolled as a new member in the Missouri Grain, Feed & Millers Ass'n, A. H. Meinershagen, sec'y, has announced.

Vandalia, Mo.—The Farmers Elvtr. & Supply Co., managed by L. W. Stottler, is installing a small size seed cleaner. Recently the company installed a 30-h.p. Fairbanks-Morse Motor to run its hammer mill.

Clarksville, Mo.—John Estes, head of John Estes & Son, operators of a 20,000-bu. elevator here, is considering installing a V-8 Ford Engine, mounted on a stationary frame to replace the motors that now operate his plant.

Smithville, Mo.—The Smithville Farmers Exchange is erecting a 6,000 bus. stud type elevator, equipped with a Western Cleaner and a Western Sheller. The A. F. Roberts Construction Co. has the contract and expects to complete the elevator in about three weeks.

St. Peters, Mo.—The Farmers Elvtr. Co. is completing its 8,000-bu. studded iron clad elevator and a feed warehouse, 36x70 ft. The elevator will be equipped with one leg with 5-h.p. motor and Howell Head Drive, 20-ton truck scale and a Western Corn Sheller and Cleaner with shaker feed. The feed house will contain a 25-h.p. Blue Streak Hammer Mill, corn cutter and grader and a Blue Streak Mixer. Tillotson Const. Co. has the contract and will complete the house May 15.

Vandalia, Mo.—Vandalia Roller Mills & Elvtr. Co., operated by W. H. Haas, is rebuilding completely its seed cleaning plant. The new two-story seed house is being built right over the old seed cleaning house, so as to avoid damage from weather to existing seed cleaning machinery, which will be left in place after the new building is completed and the walls and roof of the old building taken out. New seed cleaning machines being installed include a cleaner for scalping purposes, and a dustless machine for finishing timothy seed. A leg will be put in to carry seed to a garner bin above the machines.

Louisiana, Mo.—Fire in the Clemmets Building on Apr. 25 destroyed the market board of Pike Grain Co. Company records were saved, along with the remainder of the office equipment of this brokerage company, which has re-established in the Mercantile Bank Building.

Lockwood, Mo.—A 30x36 ft., 2-bin, frame, iron-clad, 5,000-bu. annex is being built on the elevator of the Farmers Exchange to increase the house's storage capacity to 20,000 bus. A 30x30 ft., frame, iron-clad, one-story addition is being attached to the opposite side of the elevator to house garner bins for grinding, and a new hammer mill, and 1-ton vertical Haines Feed Mixer. J. R. McNeill is manager of the business.

Greenfield, Mo.—The Greenfield Milling Co., which is owned by P. J. Hood, of Miller, and under the local management of James Allison, is starting an improvement program that includes moving an old depot on the Frisco railroad into a prominent position near the company's 8,000-bu. elevator, and transforming it into a modern office, and merchandise display room. The building is about 40x35 ft., and one-story high. At the same time an addition will be built on the company's feed grinding and mixing building to increase its warehouse space by one-third.

Lockwood, Mo.—The Farmers Exchange has under construction an addition of 30 ft. on both the east and west sides of its present elevator building, one to be used for a warehouse, the other to be used to store oats and contain additional machinery. The two new buildings will practically double the floor space of the elevator. J. R. McNeill, manager, stated all machinery has been overhauled, new belts have been installed and all equipment put in first class condition. A new hammermill may be installed. R. E. Bruce has the contract for construction of the new buildings.

KANSAS CITY LETTER

E. A. Witter, millfeed broker, is dangerously ill at the St. Joseph Hospital, Kansas City, following an appendectomy undergone on Apr. 26. Complications developed after the emergency operation. Mr. Witter has been in the millfeed business here for the last 33 years. He headed the millfeed division of the Kemper Mill & Elvtr. Co. at one time, but for the last 25 years has operated on his own account.

A grain grading school will be held here Sunday, June 2, affording grain dealers an opportunity to inform themselves on the technique of grain grading as carried on under the present government activities. This is a subject of vital importance to grain men and the Kansas Grain, Feed & Seed Dealers Ass'n, affiliated with the federal grain supervisors and inspectors in arranging for the class, urges all men in the grain trade to attend.

"The Nutritional Value of Green Grasses in Feed" was the subject of an address by Dr. W. R. Graham, Jr., before a gathering of salesmen representing the Staley Milling Co. at the company's quarterly sales meeting held in Kansas City recently.

The Kansas City Soybean Mills, a newly formed company organized by O. L. Nikles and Fred J. Wolfson for the processing of soybeans into meal, flour and oil, is converting property of the one-time Bulte Milling Co. to its manufacturing purpose. The property consists of an elevator, mill and warehouse.

Claude L. Darbe, Simonds-Shields-Theis Grain Co. was elected president of the Kansas City Chapter of the Grain Elevator Superintendents' Society at the last regular monthly meeting. William Deegan, Kansas-Missouri Elevator, was named first vice-president; Wilbur Holte, Cargill, Inc., second vice-pres., and P. A. Kier, Standard Milling Co., sec'y-treas. A regular meeting of the Society chapter was sponsored last month by the Kansas City managers. The 79 attending heard J. E. Nugent explain the provisions of the Wagner Act.

The Salina Terminal Elevator Co. has leased the Alton Elevator in Kansas City, a modern 1,000,000-bu. concrete house, and will take possession June 1. The elevator has been operated by Wolcott & Lincoln, Inc., who operate terminal elevators at Wellington and Leavenworth, Kan., as well as a number of country stations. The Salina Terminal Elvtr. Co., which has an 800,000-bu. terminal elevator at Hutchinson, is withdrawing from the St. Joseph market where they operated the Burlington Elevator. B. K. Smoot is general manager of the company.

ST. LOUIS LETTER

Edward V. Pember of the Continental Grain Co. is an applicant for membership in the St. Louis Merchants Exchange.

A car of spot wheat recently sold at \$1.15 $\frac{1}{4}$ a bushel on the St. Louis Merchants Exchange, the highest price since Aug. 10, 1937, when \$1.16 $\frac{1}{2}$ was paid. The wheat was flinty, graded No. 2 red winter, 59.2 lbs. per bushel, and 11.7 per cent moisture.

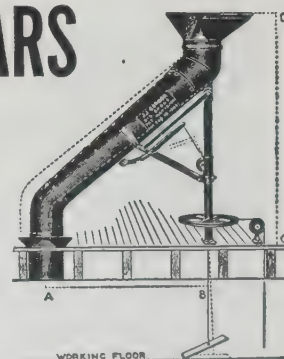
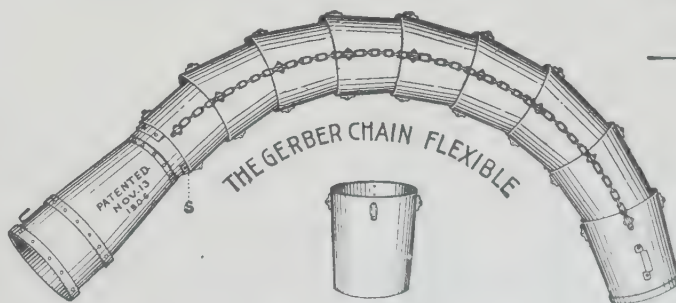
The John Wahl Commission Co., active in the grain trade for the past 80 years, discontinued business on Apr. 30. James A. Connor, who has been manager of the company's grain department for the last 10 years, is continuing in business on his own account.

MONTANA

Highwood, Mont.—A 20-ton Fairbanks Scale, new head drive, and a Strong-Scott Dump will be installed in the International Elvtr. Co.'s elevator by the T. E. Ibberson Co.

STANDARD FOR 50 YEARS

Every item in the extensive GERBER LINE of grain elevator equipment has quality built into it. This quality added to its dependability and durability has made this line standard equipment for 50 years, and assures you efficient and economical service over a long period. Gerber Spouting, long preferred by the trade, is manufactured from specially tempered steel. Insist on and get GERBER PRODUCTS.



The Gerber No. 2 Distributor Spout

Write today for a free catalog H I - 1940

J. J. GERBER SHEET METAL WORKS

518 S. 3rd St. Minneapolis

Dutton, Mont.—Slipping V-belts on a head drive on Apr. 11 caused some fire damage in the Dutton Farmers Elevator Co. plant.

Moore, Mont.—The Greeley Elevator Co. has added a 120,000-bu. storage addition to its elevator. The Victor Const. Co. set up the steel tanks.

Fallon, Mont.—A 20-ton Fairbanks Scale and Strong-Scott Dumps are being installed here for the International Elevator Co. by the T. E. Ibberson Co.

Roundup, Mont.—Kenneth Zinnecker is now manager of the Montana Elevator Co. elevator, succeeding V. G. Gossman, who is with the county assessor's office.

Lindsay, Mont.—The International Elevator Co. is installing a 20-ton Fairbanks Scale and Strong-Scott Dumps at its local station. The T. E. Ibberson Co. is doing the work.

Forsyth, Mont.—The International Elevator Co. will install a 20-ton Fairbanks Scale and a Strong Scott Dump at its local elevator. The T. E. Ibberson Co. will do the work.

Huntley, Mont.—A 30,000-bu. cribbed storage is being built here for the International Elevator Co. by the T. E. Ibberson Co. The new building will be fitted with legs and scales for shipping purposes; will have a slab foundation and will be covered with galvanized iron. Fairbanks Scales will be installed and the legs will be equipped with Calumet Buckets on a rubber belt. Electric motors will furnish operating power. Improvements will be made, also, in the feed mill.

NEBRASKA

Beatrice, Neb.—The Farmers Elevator Co. has installed a new truck scale with 34-ft. platform.

Dodge, Neb.—Crowell Elevator Co. is installing a 15-ton Howe Scale with 9x22 platform. Tillotson Const. Co. is doing the work.

Winnebago, Neb.—Ray Peters is manager of the Holmquist Grain & Lumber Co. elevator, having come here from Tekamah recently.

Pleasanton, Neb.—A. Klein will install a new head drive and motors in his elevator and raise the cupola, build a new leg and install Calumet Buckets. Contract was let to the W. H. Cramer Const. Co.

Burchard, Neb.—The Burchard Grain & Supply Co. elevator has been sold to Willis McCue who has been managing the property for some time.

Dodge, Neb.—The Farmers Grain & Lumber Co. has installed a 20-ton Howe Scale with 9x34 platform. Tillotson Const. Co. made the installation.

Salem, Neb.—Joe Windell is raising his elevator 20 ft., which will add an additional 15,000 to 16,000 bus. capacity. The A. F. Roberts Const. Co. is doing the work.

Big Spring, Neb.—The Farmers Co-op. Co. recently installed a 20-ton Fairbanks Scale, 34x9 ft. concrete platform. Work was done by the W. H. Cramer Const. Co.

Grand Island, Neb.—Sparks from a passing train getting into the dust collector, started a fire that damaged the plant of the Nebraska Consolidated Mills Co. on May 3.

Grainton, Neb.—Both elevators of the O. M. Kellogg Grain Co. were repaired recently by the W. H. Cramer Const. Co., the bins being made stronger for wheat storage.

Axtell, Neb.—The Axtell Grain & Elevator Co.'s new building, built to house a new grinder and motor, is fast nearing completion. The structure is frame covered with steel siding.

Venango, Neb.—The Farmers Grain Co. recently installed a new 20-ton Fairbanks Scale, 34x9 ft. platform and concrete deck and a new 7 ft. Winter Truck Lift, the W. H. Cramer Const. Co. doing the work.

Bertrand, Neb.—The Bertrand Equity Exchange has completed its new grinding plant where a Fairbanks-Morse Grinder, feed mixer, and 25-h.p. motor have been installed, the W. H. Cramer Const. Co. having the contract.

Bradshaw, Neb.—The Farmers Co-operative Grain Ass'n was organized here Apr. 15 when Otto Jung was elected president; Will Kroeker, sec'y-treas. The organization will engage in the handling of grain, coal, feeds and petroleum.

Elsie, Neb.—The O. M. Kellogg Grain Co. recently installed a 20-ton Fairbanks Truck Scale, 34x9 ft. concrete deck with type registering beam, and made minor repairs on its elevator and office. The W. H. Cramer Const. Co. had the contract.

Lawrence, Neb.—The Fulton Chestnut Grain Co. elevator was destroyed by fire Apr. 24, starting in the pit from spontaneous combustion. The building contained 1100 bus. of wheat and 100 bus. of corn according to Mgr. William J. Lemke, who discovered the fire as he was engaged in loading out a car of wheat. The elevator office was saved as were near-by buildings. Both elevator and grain were fully insured.

Ames, Neb.—Andrew von Rein, Hooper, has been named new manager of the Ames Farmers Union elevator to succeed Henry Edemaier who resigned recently because of ill health. Mr. von Rein has been assistant manager of the Hoopers Farmers Union elevator for the past four years. He entered on his duties here May 1. A new 20-ton Howe Scale, 9x34 ft. concrete platform, is being installed at the elevator by C. E. Carlstrom & Sons.

Hooper, Neb.—The Farmers Co.'s new elevator is equipped with one leg with 7½ h.p. motor; 6-bu. Richardson Scale; Bender Truck Dump; Howell Direct Connected Geared Head Drive with Fairbanks-Morse Motor; Howell Distributor, Bin Spouting, Roller Bearing Boot and Head; Duplex Safety Man Lift; sectional steel dump grates; and Calumet Cups. The 14,000-bu. cribbed iron clad elevator containing 8 bins is being constructed by the Tillotson Const. Co. Lawrence Mack is a new employee at the elevator, taking over the duties of Andy Von Rein who resigned to accept a position as manager of the elevator at Ames.

Candidate Butler: He made a clean campaign based on his record as a worker and administrator of large affairs. His life has been one of active progress from a humble beginner to the higher places of trust and responsibility accorded only to those of notable ability and trustworthiness. He has been tops among the grain men of the state and of the west for many years with auxiliary interests in farming and stock raising. During his busy life he has given liberally of his time and money in the support of religious and educational institutions and purposes. Hon. Hugh A. Butler as a candidate for the United States Senate is highly qualified for the position and especially entitled to the respect and consideration of the voters of this agricultural state.—Nebraska Grain Dealers & Managers Ass'n.

Brock, Neb.—Ralph Carmine of Elk Creek was made manager of the Brock Grain Co. elevator recently. He has been in the grain business for a number of years and is well qualified for the position. Raymond Vandevort is assistant manager, entering on his duties Apr. 22.

Wilcox, Neb.—When three truckers drove up to S. M. Beadle's elevator, operated as the Beadle Grain Co., and sought to purchase one load of grain here and two at Beadle's elevator in Hildreth, then on a pretext of getting gas, all three drove to Hildreth, Mr. Beadle figuratively speaking, "smelled a rat." With his assistant, Fred Gitt, he drove to Hildreth also, and found the men waiting there, to load up with wheat. It was here Mr. Beadle's eyes and an insatiable bump of curiosity got in their work, for when he noticed the scale wouldn't balance when in position, Beadle investigated. Someone had dropped a small weight in the cup end of the beam, and the would-be purchasers of the wheat were in line for a neat profit at Mr. Beadle's expense by the difference in weight had the latter not uncovered the trick.

OMAHA LETTER

George M. Gould, 81, associated with the Omaha Grain Exchange for 35 years, died Apr. 20.

The Grain Dealers Mutual topped teams in the Junior Chamber of Commerce state bowling tournament here Apr. 27 when it totaled 3,049 with a 672 handicap.

The Nebraska Grain Dealers and Managers' Ass'n will meet at the Fontenelle Hotel on May 27 and 28. An interesting program has been arranged for the occasion, among the principal speakers being Pres. E. H. Sexauer of the Grain & Feed Dealers National Ass'n. A large crowd of grain men is expected to attend.

Foreclosure proceedings against five elevators controlled by the Farmers Co-operative Grain & Supply Co. has been inaugurated by the Omaha Bank of Co-operatives. Rural elevators to come under the hammer include the 25,000-bu. house at Prosser; 18,000-bu. elevator at Muriel; 15,000-bu. capacity, Level; 10,000-bu., at Blaine; 14,000-bu., at Hansen. Only two of the elevators, at Prosser and Hansen, have been doing business in recent years.

The Nebraska Grain Dealers & Managers Ass'n will hold its state convention here at the Fontenelle Hotel, May 27 and 28. Pres. E. H. Sexauer of the Grain & Feed Dealers National Ass'n will deliver an address on May 27. Others who will attend and take part in the program are Sec'y LeDioyt of the Nebraska Grain Improvement Ass'n; a representative of the Agr. Dept. at Washington; and one of the officials of the enforcement work under the Itinerant Trucker law from Lincoln.

NEW JERSEY

Sussex, N. J.—The two-story Sussex G. L. F. Service feed, supplies, paints, oils, molasses and other merchandise establishment along the Susquehanna tracks was destroyed by fire the morning of Apr. 18 which, it is believed started from a short circuit in a switch box in the center of the building.

NEW YORK

Buffalo, N. Y.—The assets and equipment of the Henry & Missert, Inc., feed mill were offered at auction Apr. 16, and the bids received are subject to approval by the referee in bankruptcy.

Batavia, N. Y.—The H. & M. Feed Co. has been chartered to conduct business here, with Ernest S. Carnes and Alfred L. Hetzelt, Kenmore, and Jean Ackerson, North Tonawanda, as directors.

Jamestown, N. Y.—Henry Wilber, president of the Wilber Feed & Grain Co., has been forced to take hospital treatment but is improving. Mr. Wilber is a veteran feed man with a wide circle of friends in feed trade thruout the East.

LETHOGAS

Kills grain weevil—a safe fumigant

Approved by

Mill Mutual Fire Prevention Bureau.

Sent \$11.25 for 5-gallon drum.

PARSONS CHEMICAL WORKS

Grand Ledge, Mich.

"Save us
Much Time"



"The Steinitz Electric Moisture Tester saves us much time", writes

Schultz & Niemeier Commission Company of St. Louis, Missouri. "We

use it continuously . . . frequently check its accuracy with State and Government moisture tests and find this check very satisfactory . . . are convinced it is a safe, sound investment."

Send for free 36-page catalog describing the Steinitz—the one-minute electric tester—and a complete line of grain and seed laboratory equipment. Seed Trade Reporting Bureau, Inc., Brooks Bldg., Chicago, Ill.



West Winfield, N. Y.—Fire of undetermined origin Apr. 16 destroyed the former Thos. W. Smith Flour and Feed Mill, a three-story wooden structure, 100x60 ft. in size, a century-old landmark, with its equipment. The plant had not been operated for the last three years.

Clayton, N. Y.—The A. H. Herrick & Son feed mill, closed for several weeks, has been reopened with the same manager, Bert McCrea, in charge, and D. K. Briggs, a prominent feed man of Great Bend, as owner. They are specializing in custom grinding and handling a complete stock of feeds, seeds, flours, fertilizers, etc.

Buffalo, N. Y.—With the railroads' charge for carrying export grain to the Atlantic Seaboard dropping from 7.3 cents a bushel a week ago, export cereal shipments from Buffalo have risen sharply. More than 900 grain-laden railroad cars with 1,157,972 bus. rolled out of Buffalo to Atlantic ports in one week. Shipments are expected to be heavy for a short time because more than 4,000,000 bus. of Canadian grain stored in Buffalo already has been sold for export. When that is gone, a lull is expected because Montreal, which plugged last year, apparently is to have the first crack at Canada's big 1940 grain export trade. —G. E. T.

Lyndonville, N. Y.—The Page Milling Co. has completed its new mill, of frame and metal, and installation of new machinery. Among the latter is a Kelly Duplex 1-ton Mixer, Corn Sheller and Corn Cracker; Papec Hammermill and a 50 bbl. self-contained flour mill, to take the place of the Lyndonville Roller Mills that was destroyed by fire Jan. 22. The new plant has been in operation since late in April and the company announces business will be carried on as before under the new name, Page Milling Co., carrying a complete line of flours and feeds. Four grain tanks will be installed as soon as possible to construct them.

NORTH DAKOTA

Fingal, N. D.—The Atlantic Elvtr. Co. elevator burned Apr. 27.

New Salem, N. D.—The Farmers Elvtr. Co. is modernizing its receiving facilities with the installation of an Aero-Flex Telescoping Pneumatic Truck Lift.

Guthrie, N. D.—The Farmers Elvtr. Co. is equipping its plant with an Aero-Flex Telescoping Pneumatic Truck Lift and a set of Howell Sectional Steel Dump Grates.

Fessenden, N. D.—An old elevator formerly operated by the Occident Elvtr. Co. has been taken down and the material is being used in construction of the Osborne-McMillan Elvtr. Co.'s elevator at Carrington.

Wheatland, N. D.—The Farmers Union elevator was leveled by fire the night of May 2, the flames visible thirty miles distant. It is estimated 5,000 bus. of wheat was destroyed with the building. When discovered, the blaze was in the top of the elevator. Cause of the fire has not been determined. The building was completely rewired several weeks ago. Henry Lawritson is manager of the business.

OHIO

Lima, O.—The Hiram A. Holdridge elevator was damaged by high winds recently.

Shawtown (McComb p.o.), O.—The McComb Farmers Co-operative Elvtr. Co. has installed a Sidney Sheller.

Delphos, O.—A hammer mill, ear corn crusher and feed mixer have been installed at the elevator of the Garman Grain Co.

Zanesville, O.—A customer's truck recently did some damage to the driveway door of the Hook-Aston Milling Co. elevator.

Ashville, O.—Robert Kirk has been made manager of the Scioto Grain Co. elevator. He has been employed by the company for about three years.

Perrysburg, O.—V. E. Fetterman, Perrysburg, O., was elected president of the Ohio Millers State Ass'n. P. A. Lashley, Marion, was named vice-president.

Paulding, O.—The Paulding Milling Co. mill was damaged badly by fire Apr. 16, believed to have started from a hot shaft igniting a small pile of sawdust nearby.

Monnette (Marion p.o.), O.—The Monnette Grain Co. recently installed a fan sheller and new style revolving screen cleaner, purchased from the Sidney Grain Machinery Co.

Blanchester, O.—John W. Greenfield, of the Ferneau Grain Co., was recently married to Mrs. Rosalie Hatfield Leckie at Lexington, Ky. The couple will be at home here after May 25.

Bellevue, O.—Max Miels of Fremont has purchased the Daisy Mill from Mrs. John Moore and her brother, William Snyder. His son, Gerhart, will be associated with him in operation of the mill.

Bethesda, O.—James Howell of Somerton has leased the Howell Milling Co. mill and the Barnesville mill from the Howell estate and is operating them in connection with his mill at Somerton as "The Howell Mills."

Barrs Mills, O.—Andrew Keiner of Apple Creek has purchased the Barrs Mills elevator and feed store of John A. Raber and has taken possession. John Mizer and Loyal Schrock have been employed to operate the plant.

Irwin, O.—Glen G. McIlroy was elected chairman of the soybean section of the National Farm Chemurgic council at the annual meeting held in Chicago recently. Mr. McIlroy is president of the American Soybean Ass'n.

Columbiana, O.—Burglars forced a side door into the office of the Columbiana Milling & Supply Co. the night of Apr. 16 and escaped with money and checks from the safe amounting to \$1,000, to which entrance was gained by hammering off the combination. The thieves also took an adding machine valued at \$200. The \$1,000 represented \$550 in cash, the remainder in checks payment on which was stopped following discovery of the robbery the following morning. The loss was covered by insurance.

Columbus, O.—Grain men are promised an especially interesting and instructive two days' program when the Ohio Grain, Mill & Feed Dealers Ass'n holds its 61st annual convention here, at the Neil House, June 17 and 18. Prominent among the speakers will be Ray Bowden, with direct reports from Washington on storage and handling contract problems; Professor Robert M. Salter, agronomist at the Ohio Agr. Station at Wooster, whose subject will be "Improvement in Fertilizers." This is the first time this subject has appeared on one of the convention programs and it will be of special interest to all grainmen. W. W. Cummings, sec'y, urges members of the Ass'n to bring their families with them for a pleasant and profitable two-day vacation.

Maumee, O.—Contract for the 2,039,000-bu. elevator to be built adjoining the present Anderson grain elevator has been awarded to the Macdonald Engineering Co. and is expected to be completed by July 1. This expansion was made possible when Cargill, Inc., with headquarters in Minneapolis, entered the Toledo market and leased storage space in the elevator for 1,500,000 bus. of grain, and the Farm Bureau Co-operative Ass'n, Inc., which has offices in Columbus, leased grain storage space for 1,000,000 bus., it has been reported. Gustave M. Loebel of the Continental Co., whose lease on the property expires July 1, stated his firm expects to relinquish control of the elevator before that time, possibly by June 1. He announced Toledo operations would be transferred to Columbus, O. The new elevator to be operated by the newly formed Anderson Elvtr. Co., will have the largest concrete mat foundation ever poured under an elevator of similar capacity. It will be 6 ft. thick, 343 ft. 8 inches long, and 66 ft. eight inches wide. The elevator will include 26 concrete bins, each 25 ft. in diameter and 150 ft. high, with a capacity of 58,900 bus. of grain per bin; 12 interster bins, each with a capacity of 39,800 bus., and two interster bins of 15,000 bus. capacity each. The new structure will tower 40 ft. higher than the present 110-ft. elevator. It will be equipped with an air conditioning system which will change the air in the bin each hour, and it will have, also, a 20,000-bu. per hour elevating leg which will discharge onto a 42-inch belt. This equipment also will be air-conditioned, thus reducing the dust hazard. The Anderson Elvtr. Co., which will take over operation of the plant officially July 1, is headed by Harold Anderson, David A. Anderson, Sr., and Margaret M. Anderson as partners.

Clyde, O.—Slessman & Sons Co. are installing a new hammermill and mixer at its elevator and will engage in the feed business. The elevator has been repaired and remodeled for the purpose and the company will mix its own feed in the future and do custom grinding.

Columbus, O.—The Continental Grain Co., whose lease is expiring July 1 on the Harold Anderson elevator at Maumee, has leased the recently expanded elevator of the Gwynn Milling Co., which has a capacity of about 1,000,000 bus., the lease effective May 15.

Payne, O.—The Co-operative Dehydrating Co., organized by farmers of this vicinity, will build a dehydrating plant here, construction to start immediately by the O. W. Randolph Co. A site of four acres has been purchased north of the Nickel Plate tracks. The building will have three floors with a warehouse 48 x 140 ft. The mill will have a dehydrating capacity of from 2 to 3 tons of dry meal per hour. The company will have its own field equipment to cut and haul the alfalfa to the mill and has more than 1,000 acres already contracted for within a radius of 15 miles from here. It is hoped to have the plant in operation by early summer. Incorporators of the new company are O. M. Harrmann and E. S. Hartman, of Antwerp, and Dale Sitler, M. F. Wood and Evard Young, all of Payne.

TOLEDO LETTER

Toledo, O.—The Toledo Board of Trade Bowling League closed another successful bowling season with a banquet and a party April 18. The League was composed of eight five-men teams, members of which represented the Toledo grain trade.

Cargill, Inc., has leased 1,500,000 bus. of grain space in the new elevator being erected by Harold Anderson at Maumee, which announcement marks the entry of the Cargill organization into the Toledo market. Not only does the entry of this company into the local market represent a substantial expansion but it will provide an excellent outlet for Toledo grain because of the firm's extensive domestic and foreign connections.

Contract for the marine transfer unit, a part of the building program of Harold Anderson, veteran grain man, to be operated by the Anderson Elvtr. Co., has been let to the Macdonald Engineering Co. The unit, with a loading capacity of 15,000 bus. per hour, will be constructed in Toledo at the Wabash railway docks on the Maumee River. It will be equipped to transfer grain from boats to cars or the reverse and will be connected with the elevator at Maumee by the Wabash Railroad's Maumee line. The present unit is equipped with a 100-bu. per minute grain drier, two air-operated truck dumps and two carlot unloading pits, providing complete facilities for transportation service by rail, truck or water.

OKLAHOMA

Edmond, Okla.—The Farmers Grain Co. is putting new siding on its elevator and remodeling the building.

Okeene, Okla.—The Midland Flour Milling Co. sustained a small loss recently when wind damaged its elevator.

Yukon, Okla.—A bearing on a motor caused a damage loss at the plant of the Yukon Mill & Grain Co. on April 26.

Geary, Okla.—The Geary Milling & Elvtr. Co. reported small damage was sustained at its elevator as a result of recent high winds.

Altus, Okla.—The Altus Farmers Co-op. Gin, formerly the Altus Farmers Co-op. Gin Co., has had its charter amended and extended.

Hennessey, Okla.—H. N. Snare, general sales manager for Star Mill & Elvtr. Co., died recently, following an appendicitis operation.

Enid, Okla.—The Enid Terminal Elevator has let a contract to Jones-Hettelsater Const. Co. to waterproof a battery of tanks by Guntex process.

STRATTON GRAIN CO.

MILWAUKEE, WIS.

CHICAGO, ILL.

SPRINGFIELD, O.

ST. JOSEPH, MO.

NEW YORK, N. Y.

MILL FEEDS — FEED PRODUCTS — BY-PRODUCTS

Consignments and Future Orders Solicited

Watonga, Okla.—Benjamin Schubert, former Blaine County official, is now manager of the General Grain Co. Mr. Schubert is an experienced grainman.

Oklahoma City, Okla.—The Farmers Alfalfa Milling Co., an Arkansas company, has been granted a charter in Oklahoma, with paid in capital stock of \$10,000.

Renfrow, Okla.—The Feuquay Grain Co. is modernizing its old elevator and building an addition onto the west side of the present elevator. The work is being done by the A. F. Roberts Construction Co.

Red Rock, Okla.—The Farmers Exchange is overhauling its elevator. The cupola is being raised and a 10-bu. Richardson Scale and new elevator leg with Calumet Cups are being installed. Tillotson Const. Co. has the contract.

Calumet, Okla.—F. M. Laughlin has not decided whether he will build a grain elevator to replace the 30,000-bu. structure that burned Apr. 12. Mr. Laughlin stated the house was empty of grain, but building and equipment was a total loss, most of which was covered by insurance. The 15,000-bu. elevator east of the burned one, which he also owns, is in full operation.

Enid, Okla.—The Oklahoma Grain & Feed Dealers Ass'n will hold district meetings the week of May 20 to 25 as follows: Hobart, May 20; Clinton, May 21; Woodward, May 22; Alva, May 23; Watonga, May 24. W. E. Sheperd of Hobart; Ed Nelson of Clinton; Harry James and L. S. Fisher, Woodward; Claude Nickel, J. H. Whitney and Johnny Jantz, Alva; and Frank Wheeler of Watonga, are in charge of arrangements and will all make personal appearances. The meetings will be of interest and value to every grain man.—E. R. Humphrey, sec'y pro tem.

Newkirk, Okla.—The numerous cave-ins in the sides of the pit of the Farmers Elevator & Supply Co.'s 60,000-bu. elevator under construction here, have been halted, and the work of pouring concrete for the floor and sides of the slope for the dump has been completed. The house will have 17 bins, and equipment will include a leg with 14 inch belt and Calumet Cups driven by a 25-h.p. Fairbanks-Morse Motor, 30-ton Fairbanks Scale, 10-bu. Richardson Scale, Ehrsam Truck Dump and dust collectors. A concrete office building will be provided. Work will be completed June 1. Tillotson Const. Co. has the contract.

Enid, Okla.—Ray B. Bowden, executive vice-pres. of the Grain & Feed Dealers National Ass'n, will deliver an address before the Oklahoma Grain & Feed Dealers Ass'n convention, in session here May 15 and 16 at the Youngblood Hotel. Other speakers taking part in the two days' program will be D. I. Johnston, prominent attorney of Oklahoma City; Fred T. Dines of Stillwater, managing director of the Oklahoma Wheat Improvement Ass'n; A. W. Erickson, crop investigator from Minneapolis. A feature of the program will be a film showing various phases of dust explosion in both country and terminal elevators. The convention this year promises to be of highest importance and is expected to draw a large attendance.

PACIFIC NORTHWEST

Seattle, Wash.—Harry Mainwaring, 59, proprietor of the White Center Feed Store, died April 27.

Milton, Ore.—Valley Feed Co. has been organized by Arthur Coe, Lulu Coe and W. D. Coe. Capital stock \$2500.—F. K. H.

Peck, Ida.—N. N. Nelson, for the last three years manager of the Peck Grain Growers elevator, died of a heart ailment Apr. 16.

Mt. Angel, Ore.—Mark Hungate has sold his feed plant to the Farmers Union and will re-establish a feed business at Silverton, Ore.

Sulphur (Connell p.o.), Wash.—The Connell Grain Growers are building a 70,000-bu. elevator here. The Hogenson Const. Co. has the contract.

Washtucna, Wash.—The Washtucna Grain Growers, Inc., directors are planning a change in the financial structure of the co-operative. Floyd Cameron is manager of the firm.

The Dalles, Ore.—W. T. Balsiger, president of the Mid-Columbia Terminal, to establish a \$40,000 bulk wheat elevator here as preliminary to constructing a grain terminal, asked help in getting rail facilities to the site. The city now seeks a way to overcome those difficulties.

Seattle, Wash.—Regional meetings of the Pacific Northwest Feed Ass'n, Inc., will be held as follows: Southern district, May 14; Grays Harbor district, May 15; Tacoma district, May 21.

Endicott, Wash.—The Endicott Elevator Co. has been incorporated, to operate a public warehouse. It was capitalized at \$30,000; incorporators are Henry Green, C. L. Wakefield, Louis Eilert and Anna Green.

Portland, Ore.—Frederick Guy Stilwell, 61, inspector in the state department of agriculture division of grain, died at his home in Lake Grove. He had served as inspector here for the past 12 years.—F. K. H.

Longview, Wash.—Plans and specifications for the 500,000-bu. grain elevator storage addition to Port of Longview Grain Elevator, to be built by the Port of Longview for operation by the Continental Grain Co., will be completed by Edward F. Carter, consulting engineer, ready for calling bids about May 15.

Waitsburg, Wash.—E. J. Beck, who has been warehouse foreman for the Touchet Valley Grain Growers, Inc., during the past two years, has resigned his position and the vacancy has been filled by William P. Pierce of The Dalles, Ore., a young man with several years' experience in the wheat warehouse work.

Portland, Ore.—Sperry Flour Co., a concern which has grown with the west, will observe its 88th birthday this month. In addition to marketing its foodstuffs domestically the firm makes shipments to Hawaii, the Philippines, the Orient, Central and South American points and to United Kingdom. The company has upwards of 1,400 employees and an annual payroll of \$2,725,000.—F. K. H.

Asotin, Wash.—The 125,000-bu. elevator under construction here for Lewiston Grain Growers, Inc., by W. J. Morrell is rapidly nearing completion. The new structure will augment the warehouse of 160,000-bu. capacity of bulk wheat, remodeled last summer, and the old warehouse capable of housing 300,000 bus. of sacked grain, and will give the firm more than half a million bus. of wheat storage here.

Colfax, Wash.—The grain grading school scheduled for Colfax on May 4 has been changed to May 24. Willis B. Combs, senior marketing specialist of the Grain & Seed Division, A.M.S., has announced. Grainmen are urged to note the change of date and plan to attend the session set for later this month. Mr. Combs explains that early information regarding these schools are issued as a tentative schedule.

Glenwood, Wash.—The Farmers Union Warehouse awarded contract for construction of its 85,000-bu. concrete elevator to Louis Delivuk. Plans to build an elevator of cribbing and having a capacity of 100,000 bus. bulk wheat were abandoned. The elevator will be built on the site of the present warehouse formerly owned by the Pacific Coast Elevator Co., part of which will be razed. Completion of the new structure is anticipated by July 10.

Waitsburg, Wash.—The Hirsch Feed & Lumber Co. recently sold its entire stock of lumber and building materials to Potlatch Yards, Inc., and will devote all of its efforts to the feed and seed business in the future. New feed mixing machinery is being installed and other machinery in the plant will be replaced to enlarge its capacity. The firm will be known as the Hirsch Feed & Grain Co., and in addition to feed, grain and seed, a line of paints, kalsomine and glass will be handled.

Vancouver, Wash.—Plans for the 500,000-bu. malt storage elevator and cleaning house, planned for construction for the Great Western Malting Co., Inc., are being completed by Edward F. Carter, Vancouver, B. C., engineer, and building operations now hinge on the cost set by contractors when bids are called for some time before June 1 M. G. Kellett, superintendent of the malt plant, announced recently. The company is set to go ahead with the project providing bids come within cost estimates.

Connell, Wash.—The Connell Grain Growers are building a 110,000-bu. grain elevator here, converting the present warehouse No. 15 entirely into a facility for handling bulk wheat. The main part of the new construction will be in the middle part of the present warehouse and will rise 60 ft. The remainder of the warehouse will then be cribbed to accommodate the wheat in bulk. It will be an electrically driven plant, equipped with latest type machinery. Contract has been let to the Hogenson Const. Co.

North Bend, Ore.—The Hovden Seafood Products plant, a new industry, has started operations here under the management of Douglas Bennett. The company employs a method of reducing crab shell and refuse fish into poultry feed.

PENNSYLVANIA

Rahns, Pa.—Feed business in this section is not very good. We had one firm going into bankruptcy. My coal business is helping me some.—A. L. Oberholtzer.

Nottingham, Pa.—Ralph G. Mahan has purchased the interest of his former partner, J. Walter Passmore, in Passmore & Co., and will operate the company under his own name. The company handles feed, grain, hay, fertilizer, coal and building material.

West Hill (Carlisle p.o.), Pa.—Howard Heishman of Carlisle has bot the old Heishman Grist Mill, along the Conodoguinet Creek, from his father, B. F. Heishman. The mill has been in continuous operation for a century and a half and will continue the manufacture of feed and flour in the future, under the trade name of Heishman's Mill. B. F. Heishman will remain in charge for his son, who will keep his residence in Carlisle. The new owner, who has had considerable experience in the milling business, will overhaul and modernize the plant.

Mount Pleasant, Pa.—The O. P. Shupe Flour Mills property has been sold by the owners, Virginia Shupe Hood, Irene Shupe Collins and A. T. Collins to the Pritts Feed & Supply, of which William E. Pritts is sole proprietor. By terms of the sale he acquired the mill, machinery, elevator, stable, hay shed and garage. He also operates a feed mill at Smithton. The Shupe mill until this sale had been operated continuously by members of the same family's succeeding generations for 95 years. Mr. Pritts will continue the business on the same policy in effect for so many years and will retain the present employees. He plans to continue manufacturing and marketing the same feed and flour products and will handle farm implements and machinery in addition.

SOUTH DAKOTA

Brookings, S. D.—The Farmers Co-op. Co. is installing a motor driven Howell 1-ton Vertical Batch Mixer.

Vayland, S. D.—Leroy Hoover, operator of the Sheldon Reese elevator here, has resigned and R. W. Lilley is temporarily succeeding him.

Trent, S. D.—Thieves who broke into the elevator of the Quaker Oats Co. the night of Apr. 17, ransacked the office but found no loot for their efforts.

Kampeska (Watertown p.o.), S. D.—The Farmers Elevator Co. is installing in its local plant a 1-ton Howell Vertical Batch Mixer with motor drive and a Clipper Grain Cleaner.

Ethan, S. D.—William Carlton, former manager of the local farmers elevator for a number of years, has become manager of the Betts Grain Co. elevator. He also purchased the feed mill from C. H. Townsend.

Aberdeen, S. D.—General offices of the Sheldon F. Reese Elevators, operating a line of elevators and feed and seed plants in South Dakota, have been transferred from Huron to Aberdeen, effective April 22.

Buffalo Gap, S. D.—The Nolan Grain & Seed Co. has installed a new hammer mill and recently completed a new feed storage building adjoining its elevator. W. F. Nolan, manager, reports the feed business has been very good the past season.

Lake Preston, S. D.—The Farmers Union has purchased the Farmers Co-operative Elevator here and will operate it in the future. Floyd K. Johnson, formerly of Verdon, S. D., has been engaged as manager. A new 20-ton scale has been installed at the elevator which is now in operation.

Winner, S. D.—The Farmers Co-operative Ass'n has started a new petroleum ass'n in which farmers of this community are interested and which is promoted by members of the elevator ass'n. It is expected that the Farm Security Administration will be petitioned to provide financial aid for the proposed organization. A financial report of the Tripp County Co-operative Ass'n was given at a recent meeting and a very favorable balance was shown for the past season's operation.

Brookings, S. D.—Geo. P. Sexauer & Son have awarded contract to the T. E. Ibberson Co. for an additional unit to be built here in order that they may better serve the large seed trade they now have. This building will be fitted with 30 bins, 14 legs and some 25 additional cleaning machines, which will be located on two milling floors in the building. It will be a modern structure with the latest types of cleaners, all individual motor drives on legs and machines.

SOUTHEAST

Salisbury, N. C.—E. W. Burt, 74, prominent local grain broker, died suddenly following a heart attack Apr. 7. Mr. Burt was affiliated with the Froedtert Grain & Malting Co. of Milwaukee, Wis.

Inverness, Miss.—The Mississippi Valley Grain & Feed Co., of Muscatine, Ia., and Greenville, Miss., is spending several thousand dollars on a grain elevator here. The building will cover 32,000 sq. ft. and have a capacity of 500,000 bus. of sacked grain. Work is being rushed in order to be ready to receive the first of the oat crop. —J. H. G.

TEXAS

Sealy, Tex.—Schier Bros. have put their feed mill in operation and will grind and mix any kind of stock and poultry feed. The plant is a new grinding and mixing unit especially fitted for custom grinding.

Adrian, Tex.—The Texas Wheat Pool Co. is installing a 34x9-ft. concrete deck, Fairbanks Scale; an Ehram Overhead Electric Truck Dump; widening and lengthening the driveway and modernizing the entire plant. The work is being done by the A. F. Roberts Construction Co.

Fort Worth, Tex.—At the annual election of the Fort Worth Grain & Cotton Exchange on Apr. 16, W. O. Brackett was elected president, and K. K. Smith, vice-pres., for the ensuing year. Directors chosen were M. C. Rall, A. A. Hart, J. C. Simons and W. P. Bomar, all of Fort Worth, and J. Carey Crouch, of Dallas. W. P. Bomar was reelected treasurer.

Fort Worth, Tex.—Special plans have been made to entertain the ladies to whom a special invitation has been issued by the Texas Grain & Feed Dealers Ass'n for its convention May 10 and 11. The dinner-dance will prove a most enjoyable affair and many other pleasant forms of entertainment have been arranged for. Grainmen are promised a wealth of important and enlightening information during the various sessions and practical knowledge will be imparted by men who speak from experience and with authority on the subjects that are of great importance to the grain trade.

UTAH

Logan, Utah—The old Farmers Union Mill on First West and First South Sts., has been purchased by the Logan Flour Mills and completely remodeled and brot up-to-date.

WISCONSIN

Frederick, Wis.—An addition is being built to the feed house at the West Sweden Creamery.

Arcadia, Wis.—Albert Sobotta is building an addition to his mill here, for the storage of flour.

New Richmond, Wis.—The former cheese factory at Johannesburg is being remodeled into a feed mill.

Marinette, Wis.—The Marinette Flour & Feed Co. has been incorporated. Capital stock, \$60,000; incorporators: Helen Nelson, N. C. Hokenson, Emmet McCarthy.

Milwaukee, Wis.—The rate of interest for advances on grain bills of lading for the month of May, 1940, has been determined by the Finance Com'te of the Milwaukee Grain & Stock Exchange at 5 per cent.

Milwaukee, Wis.—Some of the veterans of the Milwaukee Grain & Stock Exchange gathered at the home of Thos. Corcoran recently, to commemorate his 74th birthday anniversary and honor one of the Exchange's oldest members in years of continuous association. Mr. Corcoran joined the Exchange on May 29, 1906, in the interest of his firm, Corcoran Bros. Co., feed dealers.

Reeseville, Wis.—Work is underway on the new warehouse for the Reeseville Elvtr. Co. The new structure will be of frame construction, 36x60 ft. in size, and will be used for the storage of feeds and seeds. Art Griebenow and crew are doing the work.

Superior, Wis.—The Central Co-operative Wholesale will expand its main feed mill, doubling its investment in the Ross Feed plant which it purchased in 1938. The program will get under way this summer Arnold Ross, assistant general manager of the wholesale, stated.

Fall River, Wis.—The Farmers Elevator, formerly operated by T. C. Cochrane, Portage, is being remodeled by its new managers, Ted and William Olday, and new equipment including a feed mixer will be installed. The Messrs. Olday for the past several years have operated a feed and grain business at Middleton.

Milwaukee, Wis.—A meeting between the Barley Trade here and officials of the College of Agriculture from Madison was held here May 7 to formulate plans for a preview next fall of the new 1940 barley crop. Dr. Dixon, Prof. Briggs and Prof. Vaughan represented the College of Agriculture and A. L. Flanagan was chairman.

Mayville, Wis.—The Mayville Co-op. Oil Ass'n has awarded to the T. E. Ibberson Co. the contract for the erection of an ironclad combination feed mill and 12,000-bu. elevator. Equipment will include a Strong-Scott Pneumatic Mill with 2 30-h.p. motors; Strong-Scott Mixer with a 10-h.p. motor; 60-bu. hopper scale, ½-ton dormant scale and a Nickle Crusher and Feeder powered by a 7½-h.p. motor. A conveyor to receive grain from box cars will be installed in the basement, which will extend under the entire plant. The plant will be divided into 14 bins. The leg will have 5x8 Nut-Type "B" CC buckets, and Strong-Scott Head Drive.

The A.A.A. announced Apr. 23 the letting of contracts for aerial photography of 102,800 square miles of farm lands, at a cost of \$200,704, to check on the compliance of farmers with government control.

Not enough wheat has been sold by the Canadian government to warrant an interim payment, according to J. G. Gardiner, Dominion minister of Agriculture, who has recommended amendments to the Canadian Wheat Board Act making provision for such payments, when possible. Under the present law payments on 1939 deliveries can not be made until after all the 1939 wheat has been sold, which might be not until early in 1941.

How to Balance a Scale Beam

By W. L. FRANK, Cleveland, O.

Adjust the balance ball so that when the beam is released from the bottom of the trig loop, the tip end of the beam will rise slowly to within one-sixteenth of an inch of the top of the trig loop opening, then return to within about one-sixteenth of an inch of the starting point.

Now we release the beam from the top of the trig loop and let it swing toward the bottom of the trig loop, and back toward the starting point. If the beam was properly balanced, it will swing the same distance when released from either the top or bottom of the trig loop.

A very sensitive beam will swing to within one-thirty-second or one-sixty-fourth inch, while one that is not sensitive enough may not swing closer than one-eighth, or even one-fourth inch.

When a beam has been balanced as outlined above, it is said to be balanced in the center of the trig loop, or is in center "balance," because the beam, when released from either the top or bottom of the loop, if allowed to oscillate freely until it comes to rest, will stop in the exact center of the trig loop.

Try balancing a beam in the center of the trig loop without swinging the beam, that is by the "still balance method." Now check your "still center balance" by swinging the beam from the top and bottom of the trig loop, to see how the "swinging center balance" checks. Repeat these operations several times, and note that the "swinging center balance" will repeat consistently, but that the "still center balance" is much more variable. This explains why the "swinging center balance" method of balancing and weighing is specified in most official weighing instructions and rules.

Frequent and proper balances are necessary if correct weights are to be obtained.

Don't forget to balance your scale before you start to weigh, and balance often and carefully. Rain, snow, mud, manure, etc., on the platform will cause a scale to change balance much faster than most weighers realize. Your scale platform may gain or lose 25 to 50 pounds in a very short time, and this error in your balance may throw you off your weights. Failure to balance often enough or properly, are frequent causes of weight complaints from shipping points.



HESS DIRECT HEAT DRIERS

ARE

PROFIT MAKERS

ASK

A USER

Write for Catalog

HESS WARMING AND
VENTILATING CO.

1211 SO. WESTERN AVENUE
CHICAGO, ILLINOIS

HESS DIRECT HEAT DRIER,
HAMLET GRAIN CO.,
HAMLET, IND.

Field Seeds

Ellsworth, Wis.—R. W. Smith plans to open a seed store in a building he has purchased.

Dinuba, Cal.—Geo. Eaton has purchased the Dinuba Feed & Seed Store of D. W. Schofield.

Urbana, Ill.—The Illinois Seed Dealers Ass'n will hold a meeting here June 21, according to Pres. Earl G. Sieveking.

Emma, Mo.—The Emma Co-operative Ass'n will build a seed warehouse, 26x62 ft., and install seed cleaners and cleaner leg.

Stanfield, N. C.—B. E. Holbrook's Lespedeza Seed Plant, garage and shop, were burned recently. Loss \$2,500, partly insured.

Fulton, Mo.—The Missouri Hybrid Corn Co. has taken a purchase lease of the S. R. Yantis milling property, for expansion of its business.—P. J. P.

Cody, Wyo.—The Hillberry Seed Co., of Riverton, has leased the farmers elevator here, will build a seed warehouse and install a grain and seed cleaner.

Topeka, Kan.—The Coe Seed Co. is erecting a new building on the site of one of its warehouses, of reinforced concrete, with cut stone and glass brick front.

Memphis, Tenn.—Chas. E. Heckle and his son, Chas. E., Jr., have engaged in the seed business as Chas. E. Heckle, seedsmen. Heckle, Sr., was for 50 years with the Russell-Heckle Seed Co.

Shenandoah, Ia.—Frank Field, for 30 years with the Henry Field Seed & Nursey Co., has resigned to go with the Earl E. May Seed Co. in the farm seed department and take charge of a radio program.

Amherst, Mass.—Bulletin No. 102 of the Massachusetts Agricultural Experiment Station gives the results of each test of 2,906 samples for germination and 857 samples for purity of seeds, collected between Dec. 1, 1938, and Dec. 1, 1939.

Ames, Ia.—Because of the frequent cases of subnormal germination of soybeans this year, every farmer should have his seed tested and plan to increase his rate of seeding to make up for dead seeds. The normal viability of soybeans is around 95 per cent. To determine the necessary rate of seeding, divide 95 by the actual viability figure and multiply it by the seeding rate.—Iowa State College.

Madison, Wis.—Of the 1939 Wisconsin production of red clover, 35 per cent was kept by farmers for home use and 65 per cent was sold or held for future sale. About 17 per cent of the state's alsike seed crop was kept for home use and 83 per cent was sold or kept for future sale. Of the alfalfa seed produced in Wisconsin, 44 per cent was used by the producers and 56 per cent was for sale. Growers in the state kept 33 per cent of the timothy seed crop and 67 per cent was available for sale.—Wisconsin Crop Reporting Service.

Salt Lake City, Utah.—The Utah Seed Council on Apr. 9 asked the state board of agriculture to check on the dissemination of weed seeds in small grain sold by farmers for seeding. Apr. 23 the by-laws were amended, to hold meetings the first Saturday in February, May, August and November, this last to be the annual meeting. It was decided to hold a joint meeting with the Utah Crop Improvement Ass'n at the time of the Inter-Mountain Seed Show, Nov. 8 to 14. Sec'y Victor P. Rasmussen presented a technicolor film of several reels on seed certification and noxious weed control.

Pittsburgh, Kan.—The Kelso Seed Co. is rebuilding its elevator which was partly burned some time ago.

Indianapolis, Ind.—The soybean processors in our state endorse the growing of Mandel, Richland and Dunfield varieties of soybeans because of their oil content. We feel it is a mistake to raise black soybeans except for a hay crop. These black beans have been grown rather extensively in the southwestern part of the state.—Fred K. Sale, sec'y Indiana Grain Dealers Ass'n.

Variations within Varieties of Seed Corn

By WM. G. COLBY, research professor,
Massachusetts Agri. Exp. Station

In the spring of 1939 seventy-two samples of corn, collected from different seed sources, were planted in single row plots and grown to maturity. Almost all of the important open-pollinated corn varieties grown in Massachusetts were represented in the collection. In a few instances only one sample of a variety was taken, but in most cases the same variety was collected from a number of different sources. The object of the study was to determine the range of variation between lots of seed under the same varietal name but originating from different seed sources.

Observations were made on the general plant and ear characteristics, the tasseling date and the ripening date of each sample. A fair degree of uniformity was found between different lots of the same variety with respect to such varietal characteristics as ear shape and kernel shape and color, but wide variations were found in the height of plant and the number of days required for ripening. In one instance seed of a variety from one source matured three full weeks ahead of seed sold as the same variety from another source. In several cases there were differences of ten days in maturity between different seed sources.

The results of this study clearly indicate the unreliability of variety names in corn varieties. It should be emphasized, however, that this condition is not the fault of the seedsmen but is rather an inevitable result associated with the seed production of an open-pollinated species. The relative ease by which the characteristics of an open-pollinated variety may be changed by different growers consistently selecting for different strain types, or by carrying on selection under different climatic environments, has resulted in the isolation of many strains within all important varieties. The corn grower then should bear these facts in mind when buying seed of an open-pollinated corn variety. Unless he knows just how a particular dealer's strain of a variety will perform under his local growing conditions, he is likely to be disappointed with the results from the use of commercial seed.

This situation will be greatly improved with the increased use of hybrid corn. The pollination is controlled in this case and consistent. Uniform performance can be expected from any given hybrid provided it comes from a certified seed source.

A Bag Cleaner was designed and made two years ago by Chas. Schaad, Sr., and proved so successful in use at his warehouse at Williams, Cal., that he cleans and patches 100,000 grain bags annually. For cleaning the charge is 2 cents and for patching 2 cents. Two to six men are employed to clean about 3,500 bags per day.

Western Seedsmen at Omaha

EARL M. PAGE, St. Louis, Mo., called 41st annual convention of the Western Seedsmen Ass'n to order Apr. 27 in the Hotel Fontenelle, Omaha, Neb., and delivered an address from which we take the following:

A Living or a Killing

Amidst the gloom of field seed retrospection, we meet again. History has a habit of repeating itself, but only those much wiser than seedsmen bother to profit by the repetition.

A very dry fall thruout the entire Middle West and North resulted in very poor fall business foreboding a decreased total usage or consumption of several species of grasses and legumes. This same dry fall of 1939 was ideal for seed production, maturing and harvesting.

The mild open Fall continued until almost Christmas Eve, giving every opportunity to save every pound of seed produced. From that moment on, however, King Winter reigned supreme—ice and snow throughout January and February, followed by a cold March and April, with frost as far south as the Gulf of Mexico during April to complete the picture.

By mid-February bankers began asking a few furtive questions, and the stampede started. The pompous extravagance of the seed buyers so openly displayed all fall vanished and in its place came the acute nervous jitters. The race was on to see who could cut prices the fastest in a frantic effort to dispose of inventories, which only recently had been so eagerly accumulated—on borrowed money. This, in effect, was an effort to unload on dealer customers as much as possible before the next price cut. In retaliation the dealers, quick to sense the situation, withheld orders until the very moment of resale.

It has been said of the American farmer that he is not interested in making a living but is forever trying to make a killing, and this is probably more true of seedsmen than it is of farmers.

THE SERIOUSNESS to the entire trade of these speculative activities is multiplied by the increasing costs of doing business, including higher wages, 57 varieties of taxes, 48 varieties of state seed laws, and now an all inclusive Federal Seed Law.

I suggest we adopt a resolution urging action by the American Seed Trade Association on the matter of a full time executive secretary. This matter is now in the hands of a committee and should be acted upon at the June convention.

The Fall meeting of the Western Seedsmen's Association should be held earlier. Our custom has been to hold it about December first after we've spent our money in outbidding each other, sometimes in a vain attempt to buy up the crop. Why not meet around October first or fifteenth and talk things over before it is too late.

Consideration should also be given to the possibility of holding the spring meeting much earlier.

We should definitely enlarge the region of active membership to include the entire Central West from the Alleghenies to the Rockies, from the Canadian line to the Mason-Dixon line.

HENRY WINDHEIM, Jr., of Omaha, Neb., presented a flattering report as treasurer.

J. F. COX of the U.S.D.A. called attention to increases in permanent pasture, pasture crops and legumes.

W. A. DAVIDSON, of the U.S.D.A., chief enforcer of the Federal Seed Act, told of developments during the first three months under the new law. He said there had been some improvement in the trucking situation.

DR. F. D. KEIM of the University of Nebraska used charts and pictures to illustrate his talk on "Wild Range Grasses."

Officers elected for the ensuing year are: Pres., List Peppard, Kansas City, Mo.; vice pres., Jacob Sheehan, Lincoln, Neb.; sec'y, Gager Vaughan, Chicago, Ill.; and treas., Henry Windheim, Jr., Omaha, Neb.

Loss in Detasseling Corn

G. H. Dungan and C. M. Woodworth of the Illinois Agr. Exp. Station report on a test made in 1938 to measure the loss in grain yield resulting from careless detasseling in the commercial production of hybrid corn.

Pulling 1 leaf with the tassel reduced the grain yield 8.3 per cent, 2 leaves 15.3, 3 leaves 18.1, and pulling 4 leaves reduced the yield 29.2 per cent. Detasseling without removing any leaves resulted in a yield increase of 1.4 per cent over nondetasseled plants. Weight of 500 kernels was reduced materially by pulling leaves with the tassel.

Soybeans in New England

Ten varieties of soybeans were compared in tests at the Rhode Island Agricultural Experiment Station over a period of five years. Results were obtained on both forage and seed production. Chemical determinations were made in order to ascertain the amount of nutrients produced.

Manchu, with an average yield of 41.1 bus. per acre over a four-year period, was the leading variety in seed production. Dunfield, with an average yield of 34.3 and Cayuga with 31.1 bus. per acre were the other two varieties that matured seed satisfactorily each year. The other varieties failed to mature seed satisfactorily, altho seed was harvested from all varieties every year except 1934.

The protein content of the dry matter in the soybean seed varied from 41.87 to 46.12 per cent in 1937. The protein content of the soybean seed with average moisture content will be about 40 per cent. In total digestible nutrients per acre in the seed harvested in 1937 the Manchu was the leading variety with a yield of 2,206 pounds per acre. Dunfield and Cayuga, the other two varieties maturing seed satisfactory each year, yielded 1,895 and 1,633 pounds of total digestible nutrients per acre, respectively.

Program of Pacific States Seedsmen's Ass'n

The annual meeting of the Pacific States Seedsmen's Ass'n will be held May 27 to 29 at Santa Catalina Island, Cal., opening with an address of welcome by Earl Pollock, city manager of Avalon.

Dr. L. M. Massey of Cornell University, New York, will speak on "Seed-Borne Diseases, and Their Control."

"Federal Seed Act and Regulations" is the topic of W. A. Davidson, of the U.S.D.A.

"California Seed Council," R. E. Mason, San Francisco.

"Oregon Seed Council," A. Cellers, McMinnville, Ore.

"Why Parity Prices," Dr. V. Orval Watts, economic counsel Los Angeles Chamber of Commerce.

"Plant Breeding Control Stations in Britain," Fred. N. Briggs, University of California.

"Grass and Field Seed Production on the Pacific Coast," Prof. G. R. Hyslop, Oregon State College.

"Seeds and Their Characteristics," Betty Ransom Atwater, Los Angeles.

The entertainment program will include the flying fish trip, by boat leaving Avalon pier at 9 p. m.; stag luncheon Tuesday in the solarium of the St. Catherine Hotel; in the afternoon glass bottom boat and seal rocks trip; and Tuesday, 7:30 p. m. banquet with Chas. P. Morse, toastmaster, and floor show and entertainers direct from Hollywood.

Seed Movement in April

Receipts and shipments of seeds at the various markets during April, compared with April, 1939, in bus. except where otherwise indicated, were:

	FLAXSEED		Shipments	
	Receipts		1940	1939
Chicago	3,000	.....	.....	.....
Duluth	55,550	1,229	.....	29,072
Minneapolis	176,400	34,800	131,600	57,600
Superior	32,966	.....	.....	1,942
KAFIR AND MILO				
Hutchinson	5,200	24,700	.....	.....
Kansas City	33,600	110,600	57,600	96,000
St. Joseph	None	1,500	None	None
Wichita	1,300	1,300	.....	.....
SORGHUMS				
Ft. Worth	56,000	61,600	86,800	63,200
CLOVER				
Chicago, lbs.	614,000	554,000	808,000	247,000
Milwaukee, lbs.	80,015	294,225	286,475	180,150
TIMOTHY				
Chicago, lbs.	658,000	944,000	833,000	770,000
Milwaukee, lbs.	67,095	.....	228,775	213,555

Supply Trade

Des Moines, Ia.—W. C. (Bill) Lamb, representative in Eastern Iowa for the Kewanee Mch. & Conveyor Corp., died recently.

Des Moines, Ia.—J. T. Sharp, 80, president of the Mill Owners Mutual Fire Insurance Co., recently announced his retirement, after 56 years with the company. He will be succeeded by H. B. Carson, who has been serving as secretary of the company. L. K. Sharp, son of the retiring pres., has been appointed to succeed Mr. Carson.

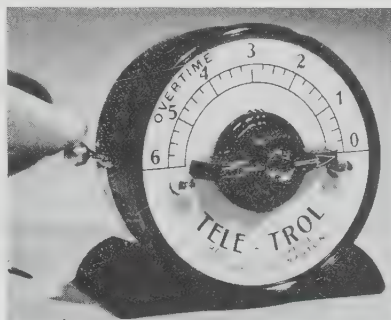
New Orleans, La.—The Southern Pine Ass'n has been ordered by the United States court to transfer all lumber grading to a separate buro, the services of which hereafter shall be available to all manufacturers of southern pine lumber without discrimination, and without any requirement that the manufacturer join or subscribe to any ass'n other than to pay for the grading service, at actual cost.

Schenectady, N. Y.—Capacitors to improve the power factor in low voltage industrial application of electric motors are described in the General Electric Co.'s new pamphlet, GEA-2742-A, of interest to engineers designing power drives. Pyranol, the treating material in these capacitors, is a synthetic, noninflammable, nonexplosive liquid, and permits an unusually small unit for a given rating.

Springfield, O.—The Duplex Mill & Mfg. Co. is mailing a new piece of literature entitled "Here's Why Kelly Duplex Mill Machinery is Bound to Increase Your Earnings." It is an attractive folder in colors showing illustrations and descriptions of the complete feed mill and elevator equipment manufactured and sold by this well known company, several newly designed and improved machines including the latest model motor driven vertical feed mixer and Model "L" Hammer Mill. Some of the new items shown are the all-steel corn crusher and feeder, the all-steel corn sheller and the powerful new bag cleaner.

A New Telephone Toll Timer

The newest protection against expensive overtime on long distance telephone and teletype calls is the Tele-Trol. This device actually measures telephone and teletype time and automatically warns you when you are about to run into expensive overtime.



Telephone Toll Timer

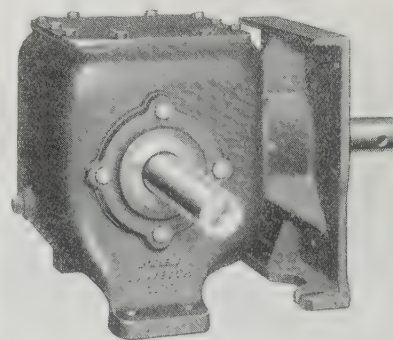
As soon as your call is connected, a touch of the lever starts the device. A warning bell rings automatically 15 seconds before the 3

minute (long distance) period is ended, thus allowing you ample time to close the conversation before incurring expensive overtime costs. The Tele-Trol shows you at a glance the time that has elapsed on any telephone call. A large saving in telephone costs is effected and monthly bills reduced to a minimum. The Tele-Trol was developed by Holcomb & Swenarton.

A New Anti-Friction Counter-Shaft Box End

To bring power losses in the operation of screw conveyor systems to an absolute minimum, as well as to provide utmost protection from fires and other accidents, common with exposed gearing, Screw Conveyor Corporation has introduced the Ace, a new one-piece enclosed anti-friction counter-shaft box end, considered a revolutionary improvement in elevating and conveying equipment.

The unit houses both gears and bearings, is completely sealed from dirt and dust, as well as being absolutely oil-leak-proof. Its roller bearings carry all thrust and radial loads, eliminating the need of a separate thrust bearing.



Anti-Friction Countershaft Box End

The box end is interchangeable with all old types and is designed with a safety factor considerable in excess of normal horse-power requirements. Compactness in design and neat proportioning avoids excessive size and weight, also reducing installation costs.

Northern Grown
SEED CORN and SEED OATS
Assure Better Results
Write for catalog and prices on O & M
dependable uniformly excellent seeds.
The O & M SEED Co. GROWERS
 GREEN SPRING, OHIO

CRABBS REYNOLDS TAYLOR CO.
 CRAWFORDSVILLE, IND.

GRAIN

Clover and Timothy Seeds

Get in Touch With Us

WE ARE BUYERS AND SELLERS OF

FIELD SEEDS

GEO. P. SEXAUER & SON

Brookings, So. Dak. Des Moines, Ia.

ED. F. MANGELSDORF & BRO.

Buyers and sellers of
 Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
 St. Louis, Missouri

Patents Granted

[Since last publication in the Journal.]

2,187,799. Drier. Ray G. Baughman, Linton, Ind. From a hopper the grain drops over a series of baffle plates, meanwhile being subjected to air blast and exhaust laterally.

2,194,052. Portable Elevator. Robert J. Owen, Chatham, Ont. Sleeves on the leg casings permit raising the head to tighten the belt, and are hinged to permit folding of the leg.

2,196,390. Grain Elevator. Geo. A. Gates, Dixon, Ill. The boot bottom is irregularly curved and fed by a hopper. The annular propulsion means is spaced from the base and is yieldable in the direction of the axis.

2,190,072. Grain Washer and Drier. Opie P. Keys, Jonesboro, Tenn. A hanger mounted for universal swinging movement moves the washer in a circular path, a rotary drier rotatable relative thereto and moving with the washer during swinging thereof, means for imparting rotary motion to said drier.

2,188,547. Dust Collector. Edward L. Anderson, Detroit, assignor to American Blower Co., Detroit, Mich. In combination, a fan, a vortex chamber, and means for adjustably controlling the volume of air leaving the vortex chamber and entering the fan, said adjustable means including at least one passageway formed by a plurality of walls fixed with relation to each other.

2,192,611. Cattle Feed. Alfred H. Kelling, Oak Park, Ill., assignor to Corn Products Refining Co., New York, N. Y. (No drawing.) Mixing corn syrup and corn steep water with slop from the manufacture of starch from corn to provide a mixture containing 30%-60% water, by weight, and then passing the mixture between heated rolls to gelatinize the starch in the slop whereby the water absorption capacity of the feed is increased.

2,192,382. Grain Cutter. Philip B. Koch, Hanover Center, assignor to S. Howes Co., Silver Creek, N. Y. A grain cutting machine comprising an outer set of cutter blades arranged in an annular row, an inner set of cutter blades arranged in an annular row, a driving shaft and means for supporting outer set of blades including a front spider head which is mounted on the driving shaft and provided with passages for the grain to be cut, a rear closed head mounted on driving shaft, longitudinal bars connecting heads and carrying outer cutter blades, and screen sections mounted on drum between the heads and bars thereof.

2,185,557. Elevator Bucket. Leon W. Koser, Winnipeg, Man. A one piece blank is formed into a bucket, with side walls converging inwardly towards base, said base being integral and continuous with rear wall and curving outwardly and upwardly, the curvature thereof conforming to two arcs, the first arc being struck from a radius of greater length than the height of said rear wall, the second arc being struck from a radius equal to approximately one-half the height of rear wall.

2,192,806. Feed Mixer. Clark L. Smith, Leola, Pa. The machine has an axially disposed upright feed screw in the mixing chamber and a casing for the feed screw open at its upper end; a removable attachment therefor comprising arcuate pipe sections, a supply pipe for liquid and projecting exteriorly of the mixing chamber removably through and supported by a wall of the chamber, and a plurality of outlet nozzles rising from the sections, each nozzle comprising a relatively small tube having an upper portion curved outwardly and downwardly.

2,194,302. (No drawing.) Separation of Amino Acids from Protein. Louis Gerber, Peoria, Ill., assignor to Corn Products Refining Co., New York, N. Y. Process of obtaining a mixture of leucine and tyrosine substantially free of other amino acids from a solution of amino acids produced by the hydrolysis of corn gluten with hydrochloric acid which comprises adjusting the hydrogen ion concentration of the solution to a point between pH 6 and 7 to bring about precipitation of the specified amino acids, and separating the precipitate from the solution.

2,190,336. Conveyor Roller. Samuel Olson, Chicago, Ill. The bearing unit comprises an outer bearing race, an inner bearing race, a plurality of rolling members between the races, said unit being frictionally secured in the socket, the inner race having a threaded bore, a bearing support and a screw in said support disposed with its threads engaging the bore of the inner race for clamping it to the support, the outwardly disposed end of said inner race having radial notches, and a split spring washer disposed between said notched end of the race and support engaged with one of the notches for locking the bearing member against rotation.

2,192,698. Type Registering Beam. Jos. B. Sowa, Delavan, Ill. An elongated number plate is rigidly mounted on the bar for indicating in thousand pound units the adjusted position of said main poise, a hundreds poise carried by said main poise, an indicating element controlled by said hundreds poise for indicating in hundred pound units the adjusted position of said hundreds poise, a units poise carried by said main poise and an indicating element controlled by units poise for indicating fractions of hundred pounds, said indicating elements being arranged in cooperative proximity to said number plate to present to view as a single number the composite indications of said plate and elements.

2,188,483. Car Mover. Carl E. Peterson, Long Beach, Cal. The surface of the shoe adapted to rest on the rail is convexly curved from the front to the rear thereof, a main operating lever pivotally attached to the rear of the shoe, a bar pivotally mounted in the shoe and arranged below the operating lever, the forward end of said bar being adapted to engage a wheel of the car, a link connecting the operating lever and the bar and pivotally attached to each, and a spur on the shoe.

2,196,391. Grain Ventilator. August Gronert, Furstenwalde-on-the-Spree, Germany. A ventilating plant for goods piled up such as grain, comprising substantially horizontally laid perforated conducting and distributing elements, a main supply element connected to them, and means for feeding air to said supply element, the distributing elements consisting each of a substantially V-shaped upper part and a bottom part having side walls inclined so as to converge towards the bottom, said upper part and said bottom part being removably connected to each other and the perforations of said distributing elements being arranged only in said inclined side walls of said bottom part.

2,192,076. Corn Cracker and Grader. Jas. A. Grow, Columbus, Ind. A casing is supported on top of the bins and communicating therewith, a shaker cage having side walls is mounted to swing pendulum-wise in the casing above the bins, means for shaking the cage, a plurality of downwardly inclined screens arranged in a vertical stack between said walls, said screens being progressively smaller in mesh respectively from the upper to the lower screen, the delivery ends of each two contiguous screens being reversed with respect to each other to discharge from opposite ends of the cage, a collecting trough on the bottom of each screen delivering cracked corn to the top of the next underneath screen.

2,186,066. Soybean Crusher. Henry Ford and Robert A. Boyer, Dearborn, assignors to Ford Motor Co., Dearborn, Mich. The crusher comprises a bearing block pivotally mounted upon base plate so as to swing in such arc that the axis of driven shaft swings radially toward and from the axis of driving shaft, a ring fixed to the end of driven shaft adjacent to roll, said ring enclosing said roller and having a bore materially larger than the periphery thereof, means for resiliently urging bearing block laterally so that ring bears against one point on the periphery of roller, a tube disposed in the space between roller and ring at the point of greatest separation therebetween, said tube extending at an angle, and a scraper blade.

Canadian oats are said to be driving domestic oats out of the New England market, the Dominion offering large quantities at low prices.

From Abroad

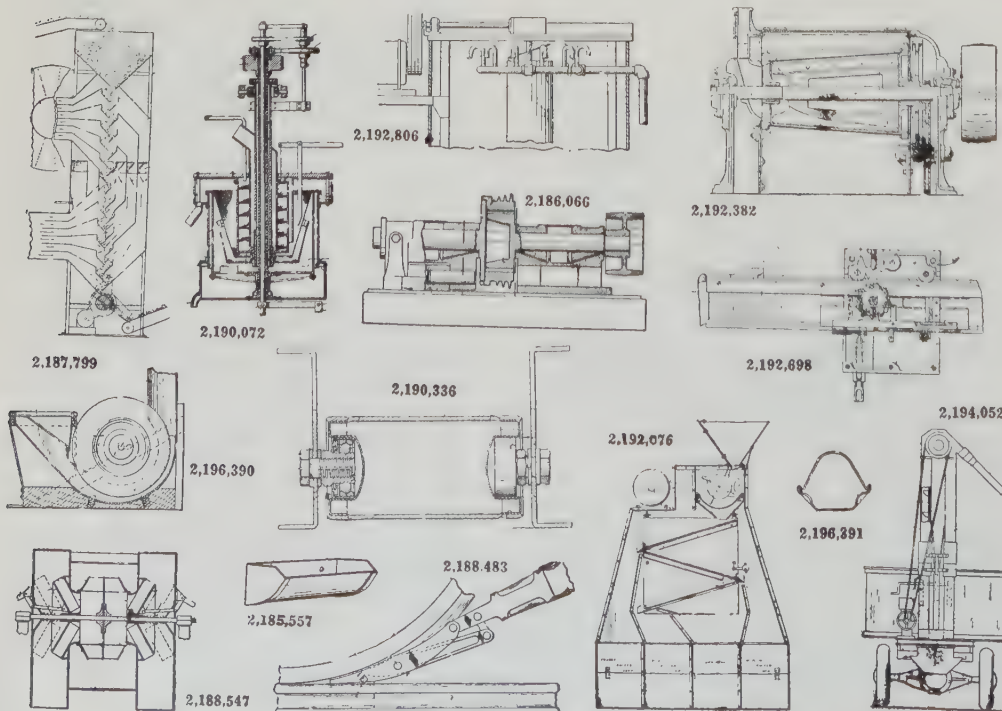
Buenos Aires.—The Argentine National Grain and Elevator Commission has established official grades for the 1939-40 wheat crops. No. 1 will test 62.15 lbs. per Winchester bushel, No. 2, 60.6 lbs.

Madrid, Spain.—The government on Apr. 30 reduced the bread rations from 8.8 to 4.4 ounces per day per person, on account of the wheat shortage, resulting from lack of boats to carry the grain from Argentina.

In Southeastern Europe the production of soybeans has increased rapidly the past few years, from 5,000 acres in 1934 to an estimated acreage of 545,000 acres this year, or a 70 per cent increase over a year ago.

London, Eng.—The Food Ministry announced May 2 that use of flour or any milled wheat product for other than human food is prohibited after May 6 under special license. The order affects dog and live stock foods.

Denmark depended, for the production of livestock products, on the importation of a large quantity of coarse grains, but the allied blockade will most decidedly stop any coarse grains from entering Denmark from over the seas (with the exception of the Baltic Sea and Gulf of Bothnia), hence the amounts of livestock products which Denmark can produce in the future will be decidedly less than they have been in the past.



Feedstuffs

Chicago, Ill.—The American Dry Milk Institute held its 15th annual meeting Apr. 17 at the Edgewater Beach Hotel with a large attendance.

New Orleans, La.—At the convention May 13 and 14 of the National Cottonseed Products Ass'n H. L. McGeorge of Memphis, Tenn., will speak on "Vegetable Protein Concentrates."

Atlanta, Ga.—The Ass'n of Southern Feed Control Officials at their 2nd annual meeting here Apr. 23 and 24 elected Geo. H. Marsh, Montgomery, Ala., pres., and E. H. Holman, Nashville, Tenn., sec'y-treas.

Ottawa, Ont.—Exports of bran, shorts and middlings from Canada in March totaled 19,891 tons, of which 19,601 tons moved to the United States. For 12 months ending with March, 1940, exports of millfeed from Canada totaled 281,515 tons, compared with 108,079 tons in the previous year.—Dominion Bureau of Statistics.

Sacramento, Cal.—There are three kinds of rice bran on the market; namely, rice stone bran, rice huller bran, and rice mill run bran. The official definitions set forth clearly what these materials are. They should come to you properly labeled. Your list of ingredients should properly state the type of bran you are using. The term rice bran is not sufficient. You must indicate the type of bran you are using.—L. M. Jeffers, California Dept. of Agriculture.

Sacramento, Cal.—The new board of directors of the California Hay, Grain and Feed Dealers Ass'n has authorized Director Ed Durr and com'te of directors to carry thru arrangements already under way with Dean C. B. Hutchison, College of Agriculture, Berkeley, for a Nutritional Conference tentatively scheduled for May 23, 24, at University Farm, Davis, Cal. The dates for this Feed Dealers Conference with the University Research, Educational, and Field Service Departments will be definitely established; and members will be fully advised, so as many as possible will have time to make plans to attend this important affair. Invitations to attend will go to owners and managers and these in turn will find it extremely valuable to bring along their field men to this Two Day School for the benefit of their local feeding customers.

Commercial Feed Sales in Ohio

J. I. Falconer of the Department of Rural Economics of the Ohio State University reports the following sales annually of commercial feeds to the retail trade as reported by 235 firms:

	—Estimated Tons—		
	1937	1938	1939
MIXED FEEDS			
Dairy feeds	73,030	79,719	78,773
Poultry feeds	145,885	159,642	177,259
Hog feeds	42,946	42,381	49,454
Other mixed feeds	23,904	23,149	30,371
Total	285,765	304,891	335,857
UNMIXED FEEDS			
Soybean meal	27,297	43,303	48,114
Cottonseed meal	11,461	10,774	10,753
Linseed oil meal	10,254	12,374	13,724
Bran	40,493	45,801	42,535
Middlings	52,966	49,711	50,452
Alfalfa meal	4,349	4,139	4,202
Gluten feeds	14,949	16,190	16,181
Hominy	12,443	13,373	15,649
Tankage	12,910	11,934	9,884
Meat scraps	25,154	20,811	18,700
Fish meal	817	923	1,408
Milk products	3,984	4,382	3,866
Other	31,946	31,573	31,052
Total	244,023	265,288	266,520
Total (All)	529,788	570,179	602,377

Misbranding of Feed

At Kansas City the U. S. attorney seized 74 cases of dog and cat food Aug. 18, 1939, that had been shipped by the National Coast Products Corporation, a subsidiary of the E. F. Hurff Co., from Swedesboro, N. J. The article was labeled in part: "Champy Dog and Cat Food, Contents Meat, Meat By-products, Bran, Barley, Soya Meal, Salt, Charcoal, Carrots, Cod Liver Oil."

This product was labeled to indicate that it contained, among other ingredients, significant amounts of meat, meat byproducts, and carrots; whereas it contained very small amounts of these products.

Adulteration was alleged in that valuable constituents, meat, meat byproducts, and carrots had been wholly or in part omitted from the article; and in that water had been added thereto, or mixed or packed therewith so as to increase its bulk or weight and reduce its quality.

It was alleged to be misbranded in that the representations in the labeling that it contained meat, meat byproducts, and carrots were false and misleading.

On Sept. 13, no claimant having appeared, judgments of condemnation were entered and the product was ordered destroyed.

Lebanon, O.—The Roxanna Canning Co. has been ordered by the Federal Trade Commission to cease misrepresenting its dog foods as containing beef by-products. The Commission finds that these representations are false and misleading, and that the foods do not contain beef by-products, ground beef bone or beef, and are not scientifically balanced rations or scientifically balanced beef rations.

Western Mills, Inc., Sioux City, Ia., has agreed with the Federal Trade Commission to cease using the word "Meat," either alone or in connection with the words "Scraps" or "Meal," in the trade name for a product which is not composed wholly of meat, meat scraps or meat meal, unless, if the product is composed in substantial but less than a predominant part of meat or meat products, to desist from representing its product to be the "one and only balancer" when in fact there are on the market other substances of about the same value which are intended for similar uses, and to discontinue any representation relating to the proportions of savings in feeding costs allegedly obtained from the use of the product, when in fact there is no authentic basis for

such claimed savings. The respondent sold its product under the trade names "Sioux Prize Mineral Meat Scraps" and "Sioux Mineralized Meal."

Feed Mfrs. Will Meet

The annual convention of the American Feed Manufacturers Ass'n, Inc., will be held at French Lick Springs, Ind., May 23 and 24.

Pres. R. M. Field, Chicago, and W. R. Anderson, treas., Milwaukee, will present their annual reports. Following are the speakers:

"Some of the Ills of Feed Control," J. Frampton King, Atlanta, Ga., pres. Ass'n of American Feed Control Officials.

"Futures Trading in Vegetable Meals on Memphis Merchants Exchange," Walter Chandler, mayor of Memphis.

"Meeting Present Consumer Attitudes in the Feed Business," Miss Aubyn Chinn, Chicago, mid-west director consumer relations, of the Borden Co.

"The Need for Fat and Vitamins in Dairy Rations," round table nutritional conference led by Dr. L. A. Maynard, Cornell University, Ithaca, N. Y.

"Twelve Sales Betterments I Would Consider if I Were a Feed Manufacturer," Burton Bigelow, New York, N. Y.

The moving picture "Vitamins on Parade" will be presented by Allied Mills, Inc.

There will be the usual golf tournament which will be played on the lower course adjacent to the hotel and there will be the usual generous allotment of prizes.

The usual Ladies' Bridge Party will be held on Friday afternoon with a good selection of prizes for the winners.

On May 1 the amount of corn under C.C.C. loan was 301,299,000 bus., an increase of 397,000 for the week.

Georgia Feed Manufacturers Organize

Feed manufacturers of the state of Georgia called by J. Frampton King, pres. of the Ass'n of Feed Control Officials, heard addresses by Ralph M. Field, pres. of the American Feed Mfrs. Ass'n, Dr. Milton Jarnigan, of the College of Agriculture, Athens, Ga., Mr. King and others, stressing the benefits of organization, at a dinner at which 60 were present at the Ansley Hotel, Atlanta, Apr. 24.

Officers chosen for the new Georgia Feed Mfrs. Ass'n are: pres., R. E. Barinowski, Augusta; vice pres., Grant Card, Atlanta; sec'y, M. C. Griffin, Atlanta, and treas., L. C. Brown, Macon.

Directors: Joe Beal, Atlanta; R. E. Barinowski; L. C. Brown, R. I. Zacharias, Columbus; Mac H. Able, Albany; Grant Card; Clyde Nichols, Griffin; H. C. Tedford, Rome, and J. R. Austin, Winder.

The next meeting will be held Oct. 10 to 12 at Athens, Ga.

"RANDOLPH"

OIL-ELECTRIC GRAIN DRIER

The Drier Without a Boiler

ASK THE MAN WHO HAS ONE

THAT'S ALL

MANUFACTURED BY

O. W. RANDOLPH COMPANY

3917-21 Imlay St., TOLEDO, O., U. S. A.

Molasses in Cattle Feeding

By A. E. LANGWORTHY, Research Inspector,
State Board of Agriculture, Topeka, Kan.

Whitman Rice, of the National Sugar Refining Co., says that cane blackstrap molasses contains about 52 per cent of total sugars, of which 35 percent is sucrose. He states further that "All the organic materials, including the sugars, are easily digested; the only limitation being the mineral matter present which reduces the quantity that may be consumed in any given ration." This statement by Mr. Rice agrees with one made by W. H. Dalrymple, of Louisiana State University, in a publication entitled "Blackstrap Cane Molasses," in which he states that sugarcane blackstrap contains 52.38 per cent of combined sugar. Mr. Dalrymple also mentions the salts or mineral matter contained in molasses and seems to think there is less in cane blackstrap than in beet blackstrap. This agrees with a statement by F. B. Forbes, director of the institute of animal nutrition, Pennsylvania State College, that beet molasses and cane molasses have the same feeding value when they have the same moisture content, but beet molasses contains mineral salts which render it decidedly more laxative than is cane molasses.

This matter of the laxative effect of molasses is mentioned in a report of an experiment by the Ohio Experiment Station (Bulletin 463) which states that—

"The molasses-fed cattle were slightly looser than the lot 1 cattle. Lot 4, self-fed molasses, was looser than either of lots 2, 3, or 5, though they were not sufficiently loose to be subject to criticism. In our experience beet molasses was not noticeably different from cane molasses in this respect.

"All lots received the same amount of protein supplement with corn silage, and mixed clover and timothy hay. The protein supplement consisted of equal parts of linseed meal and cottonseed meal, each being fed at the rate of one pound daily per calf. Six and one-half pounds of mixed hay were fed daily per calf, regardless of lot, throughout the test.

"Lot 1, in addition, was fed all the shelled corn they desired.

"There seems to be some difference of opinion relative to the ability of feeding molasses to replace corn. With this in mind two pounds of shelled corn in the ration for each calf of lot 2 were replaced by two pounds of cane molasses; that is, when the calves of lot 1 received six pounds of shelled corn per calf, the calves in lot 2 received four pounds of shelled corn and two pounds of molasses.

"Lot 3 was fed two pounds of cane molasses per calf and all the shelled corn they wanted.

"Lot 4 was self-fed molasses from a feed bunk placed in the lot, molasses being constantly available. These calves were also given all the shelled corn they wanted.

"Lot 5 was fed beet molasses. Their ration was the same as that of Lot 3, excepting that beet molasses replaced cane molasses."

Bulletin No. 463 shows also the ash content of the molasses used: Cane molasses ash 3.48 percent, beet molasses ash 4.44 percent, which is a very low ash content.

A. J. Schmidt, president of the Tarkio Molasses Feed Co., and a cattle feeder himself, who uses in his mill and in the feed lot from 300 to 400 cars of molasses a year, prefers the cane blackstrap on account of its greater palatability and less liability to scour the cattle. He mentions the fact that beet molasses seems to have a tendency to turn alfalfa hay green, making it attractive to the eye and rather enticing to the purchaser.

According to information from the United States Beet Sugar Ass'n, beet molasses contains from 47 per cent to 53 per cent of sucrose, 1 per cent to 5 per cent of raffinose, and less than 1 per cent of invert sugar. Invert sugar is a mixture in about equal parts of levulose and dextrose and may be made from sucrose by treating it with heat and a weak acid.

The corn blackstrap or Hydrol is not so well known as the cane or beet blackstrap, but as it contains a large per cent of sugar it should be a very valuable feed.

The corn products manufacturers and the

beet sugar people both use a large part of their molasses to make other of their products, such as sweetened corn gluten feed and dried molasses beet pulp. When cattle are started on a feed containing beet or corn blackstrap they appear to relish it and do well on it, but if started on a cane blackstrap feed and then abruptly changed over to a beet blackstrap feed, they do not seem to like it so well as first and are apt to go off feed and scour.

The amount of ash or mineral matter is also important, for the laxative and diuretic effect seems to be proportional to the amount of ash present. One large and well-posted feeder claims that over 8 per cent of ash is not good. It appears that it is unwise to switch abruptly from cane molasses to beet, or from cane molasses of low ash or mineral content to one of high ash or mineral content.

Blackstrap Molasses in Lamb Ration

H. M. Briggs and V. G. Heller of the department of agricultural chemistry research of the Oklahoma Agricultural Experiment Station, in a series of digestion trials found that the inclusion of large amounts of blackstrap molasses lowered the digestibility of certain nutrients in a lamb ration. Four lambs were used in each of three separate digestion trials. The lambs were placed on each ration for a preliminary period of 10 days. They were then placed in a metabolism cage and the feces recovered for a like period.

The substitution of 230 gm. of molasses for the same amount of corn in a corn-alfalfa hay ration lowered the digestion coefficients of crude protein, but the decrease was not significant. The digestibility of fat was lowered 18.3 per cent which was highly significant. The average crude-fiber and nitrogen-free-extract coefficients were lowered very slightly but not insignificant amounts.

The replacement of 230 gm. of oats with molasses in an oats-alfalfa hay ration lowered the digestion of protein the highly significant amount of 4.6 percent. The digestibility of fat was decreased 17 per cent, a highly significant amount. When the three trials are considered together, the changes in the digestibility of fiber and nitrogen-free-extract was not significant. In the third trial the addition of molasses to the oats-alfalfa hay ration did completely than the smaller amounts of fat

increase, to a highly significant extent, the digestibility of the nitrogen-free-extract of the ration.

The lambs used in the study digested the fat and fiber in an oats-alfalfa hay ration more and fiber in a corn-alfalfa hay ration. The difference was highly significant.

SAVINGS PAY FOR IT



• Savings in labor and current costs will more than pay for your Kelly-Duplex equipment in a surprisingly short time. Kelly-Duplex mill and elevator machinery is easier to operate and runs efficiently at higher speeds. Designed to produce a better quality product . . . constructed for a longer life of trouble-free service.

Write today for further information about Guaranteed Kelly-Duplex equipment.

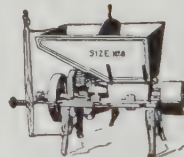
BUILDERS OF KELLY-DUPLEX MILL MACHINERY

THE DUPLEX MILL & MANUFACTURING CO.
SPRINGFIELD - OHIO

BOWSHER Crush Grind Feed Mills' Mix

Rapidly crush ear corn (with or without husk) and grind all the small grains; either separately or mixed—mixed as they are being ground—not before or after. This saves time and labor.

"COMBINATION" MILLS

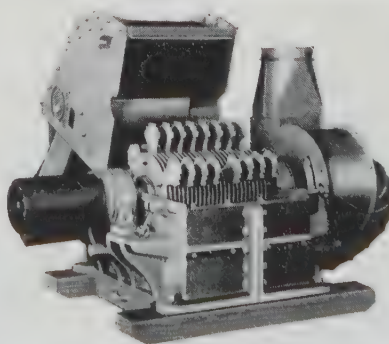


Use the famous Cone-Shape burrs. Light Draft. Large Capacity. Solidly Built. Long Life. Special sizes for the milling trade. Sacking or Wagon Box Elevator. Circular on request.

THE N. P. BOWSHER CO.

SOUTH BEND

INDIANA



MOST EFFICIENT GRINDER MADE "JAY BEE" SOLVES EVERY GRINDING PROBLEM

WHEN you want any grinding job done well, fast, and economically, you can always depend upon the "Jay Bee". Mill in operation over 10 years, has ground over 33,000 tons of

feed, had a maintenance cost for screens and hammers as low as only one cent a ton—and still in good condition.

Mill Runs 1,080 Hours Straight

ANOTHER "Jay Bee" mill, in continuous service for 10 years, one time ran 1,080 hours straight (45 consecutive days and nights) with only one stop to change hammers.

Service like this is what you need. The "Jay Bee" is made to take the abuse of the hardest grinding jobs.

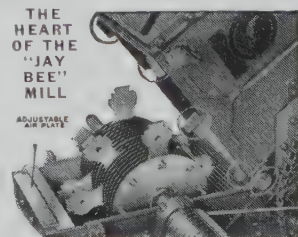
Made by the Bossert Co., Inc., Utica, N. Y., World's largest manufacturers of hammer mills. Sizes and styles from 12 H.P. to 200 H.P. with belt, V-belt, and direct-connected drives.

Batch mixers, corn crackers, molasses mixers. Write for descriptive literature, prices, terms, etc.

J. B. Sedberry, Inc., Dept. 76, Franklin, Tenn. -- Utica, N.Y.

John J. Woods & Sons, Jay Bee Sales Co., Kansas City, Mo.

J. B. Sedberry Co., 2608 So. Wells St., Chicago, Ill.—A. E. Thompson Co., 817 Washington Ave. N., Minneapolis, Minn.—Jay Bee Sales Co., 395 Broadway, New York—Jackson, Tenn.—Moultrie, Ga.—Atlanta, Ga.—T. G. Holland, 429 Kathmere Rd., Brookline, Del. Co., Pa.—Jay Bee of Texas, 705 Ross Ave., Dallas, Texas.



Molasses for Maintenance Rations

By T. E. WOODWARD, Senior Dairy Husbandman, Bureau of Dairy Industry, Washington, D. C.

Cane molasses contains about 26 per cent water, 3 per cent of protein and 65 per cent of carbohydrates. Fifty per cent or more of the molasses is sugar. Compared with cane molasses the beet molasses contains a little more protein and a little less carbohydrates. Molasses weighs 11.7 pounds to the gallon, and the specific gravity is 42° Baumé scale.

Most of the molasses used for feeding livestock comes from the sugar cane and is commonly called "blackstrap." Cuba, Puerto Rico, the Philippines and Hawaii furnish most of the feeding molasses used in the United States. This is transported to American ports in tank steamers holding 4,000 tons or more. It is then pumped into tank cars or tank barges for transportation inland, the some for the local use of small consumers may be put directly into barrels. Tank cars hold 80,000 to 100,000 pounds. These cars are equipped with coils through which steam may be run for heating the molasses.

The drums holding about 55 gallons weigh about 50 pounds each and are about 35 inches high, 23 inches in diameter, and have a two-inch opening closed with a screw plug either in the side or end of the drum, and a smaller opening in the end of the drum. When filled, these drums will weigh nearly 700 pounds. Secondhand drums in good condition may sometimes be bought at a cost as low as \$1 each, while new drums may cost \$2.50 or more. Drums used to transport lubricating oil are satisfactory if well cleaned.

The usual method of transferring molasses from tank cars to barrels is to first draw off the heated molasses into an underground cistern. Then pump the molasses from the cistern into barrels. The cost of this service, exclusive of the cost of the barrel, should not exceed 1½ cents a gallon.

Beet and cane molasses are practically equal in nutritive value except that beet molasses is

more laxative than cane molasses and for this reason cannot be fed in such generous amounts. Three pounds of beet molasses a day to an animal weighing 1,000 pounds is considered the maximum allowance, and while greater quantities of cane molasses can be fed without harm, certain experiments indicate that three pounds of cane molasses may be near the optimum allowance. On account of its low content of protein, molasses will not balance a ration of nonleguminous roughage. In balancing a ration it is in the same class with and would replace corn, although it contains even less protein than does corn.

The feeder wants to know how much he can afford to pay for molasses. The digestible nutrients in 100 pounds of No. 3 corn is estimated at 80.0 pounds; in 100 pounds of cane molasses at 59.5 pounds. The author ventures the opinion that for maintenance purposes 80.0 and 59.5 fairly represent the relative values of corn and molasses. In other words, 100 pounds of molasses is worth about 75 per cent as much as

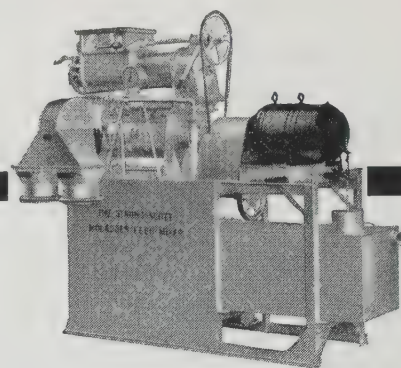
100 pounds of corn, considering only the nutrient content of both feeds. If the roughage is good enough so that the stock will eat all that is offered to them the corn or molasses fed with the roughage will have the relative values as given, but if a part of the roughage is refused and the addition of molasses to the ration induces a more complete consumption of the roughage, the molasses, of course, must be credited with an additional value. The extent of this additional value cannot be determined accurately, but it can be said that the poorer the roughage the greater the value of the molasses fed with it. With corn at \$32 per ton, molasses should be worth, when fed with an ordinary grade of roughage, at least \$24 a ton, and when fed with a poor roughage it might possibly be worth fully as much as corn.

Canadian mills ground 3,094,357 bus. wheat during March, against 2,874,726 bus. in March, 1939, as reported by the Dominion Bureau of Statistics.

Good Equipment At A Reasonable Price Molasses Feed Mixer

Here is a Strong-Scott unit that is a money-maker for any feed plant. It produces a smooth, uniform product, free from molasses balls, that commands higher prices.

It is roller bearing equipped and has an all-steel frame structure for greater stability and life. Our new lowered price makes it an economical piece of equipment for you. Ask for complete details.



Roller Bearing Equipped
All-Steel Frame

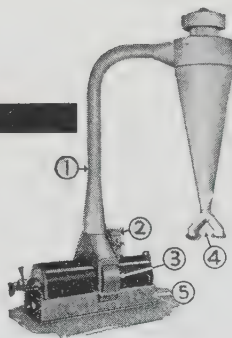
Feed Prices

The following table shows the closing bid price each week for July futures of standard bran and gray shorts, spot cottonseed meal and No. 1 fine ground alfalfa meal, in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

Minneapolis Spot				Kansas City			
Bran		Midds.		Bran		Shorts	
Mar. 2.....	21.50	20.75		16.60	20.50		
Mar. 9.....	22.50	21.50		16.60	20.50		
Mar. 16.....	23.00	21.50		16.35	19.50		
Mar. 23.....	23.00	22.00		16.50	19.90		
Mar. 30.....	23.50	22.00		16.40	20.40		
Apr. 6.....	23.50	23.50		16.70	20.40		
Apr. 13.....	24.50	24.50		16.50	20.25		
Apr. 20.....	24.50	24.50		17.10	21.10		
Apr. 27.....	24.00	24.00		17.10	21.25		
May 4.....	24.00	24.00		17.15	21.00		
*St. Louis				Chicago			
Bran		Shorts		Soybeans		Meal	
Mar. 2.....	19.45	22.25		113¾	29.20		
Mar. 9.....	19.50	22.25		118¼	31.20		
Mar. 16.....	19.20	21.75		111½	29.20		
Mar. 23.....	19.40	21.85		112	29.20		
Mar. 30.....	19.50	22.60		110½	29.20		
Apr. 6.....	19.65	22.00		106¾	29.20		
Apr. 13.....	19.50	22.25		106¼	29.20		
Apr. 20.....	20.25	23.10		108¾	29.70		
Apr. 27.....	20.35	23.25		107¼	30.20		
May 4.....	20.35	23.15		109¾	29.50		
Cottonseed Meal				Kansas			
Ft. Worth		Memphis		City Alfalfa		Chicago Corn	
Mar. 2.....	37.00	30.50		23.50	58¼		
Mar. 9.....	37.00	30.50		23.25	58¾		
Mar. 16.....	37.00	29.00		23.25	57¾		
Mar. 23.....	37.00	30.20		23.25	59		
Mar. 30.....	37.00	30.50		23.25	58		
Apr. 6.....	37.00	30.50		23.25	59¾		
Apr. 13.....	37.00	30.50		23.25	62¼		
Apr. 20.....	37.00	30.50		22.75	67¾		
Apr. 27.....	37.00	31.25		22.25	67¼		
May 4.....	37.00	31.25		22.50	68		

*St. Louis bran, basis Chicago delivery; shorts, St. Louis delivery.

Prevent Fires and Explosions



Pneumatic Attrition Mill

This compact and efficient Strong-Scott unit eliminates the possibility of a dust explosion occurring from sparks created by foreign material passing through the grinding plates. This is only one of its many features.

Our Strong-Scott Attrition Mill Pneumatic System added to your present attrition mill, will give you the same protection.

Write for complete particulars on these units.

Everything for Every Mill, Elevator
and Feed Plant

The Strong-Scott Mfg Co.

Branch Office: Great Falls, Mont.

Minneapolis Minn.



Poultry Feeds and Feeding

Webster City, Ia.—Thirty days in jail was meted out to Guy Spencer, 68, of Fort Dodge, for selling improperly labeled poultry remedies. He was unable to pay a \$100 fine. Another pending charge against him is selling stock tonic without proper registration.

Iodide Reduces Mortality

Feeding potassium iodide and wood ash to the breeding stock reduced mortality of the chicks hatched from its eggs, according to experiments by F. B. Harpor, reported in *Agriculture & Livestock* in India.

Free range, declared the author, had a marked effect in increasing the hatchability of eggs from breeding stock.

Keep Oats in Poultry Rations

W. R. Whitfield, Iowa State College poultryman, worries about outbreaks of cannibalism among 1940 chicks because of the short supplies of oats. Insufficient oats in the diet is claimed to be one of the causes of cannibalism.

"Oats are so important in the ration of growing chicks that in most cases it would pay producers to buy oats, even at present prices, when home-grown supplies are exhausted," he says, adding that "ground whole oats should comprise 30% of the chick mash and part of the grain feeding later on, since the oat hulls supply something essential which the birds can get in no other feed."

Light oats, if ground finely, can be used if heavy oats are not available.

There are other causes of cannibalism besides insufficient oats, Whitfield points out. He recommends that poultrymen feed a balanced ration and make sure the oats in the chick mash is finely ground and that all other mash ingredients are not.

Dry mash that "stays put" when squeezed in the hand and does not fall apart is too fine and may clog the throat and digestive passages. When buying mash for baby chicks make sure it contains from 5 to 8 per cent fiber.

Riboflavin in Eggs Increased by Feeding

The maximum amount of riboflavin that hens can store in their eggs the time required to reach this maximum, and the time of subsequent depletion were points involved in studies by J. C. Bauernfeind and L. C. Norris, at Cornell University, with white Leghorn hens and basal diets estimated to contain 100 micrograms of riboflavin per 100 grams.

Adding 720 micrograms of riboflavin to each 100 grams of the ration, by means of a concentrated liver extract, raised the riboflavin content of fresh egg white from the basal level of .65 micrograms per gram to 2.5 micrograms, and that of fresh egg yolk from the basal level of 1.1 micrograms per gram to 2.7 micrograms, in 4 weeks. The subsequent depletion time was also 4 weeks.

Gradually increasing the riboflavin content of the basal diet to 960 micrograms per 100 grams in a 16 week period increased the riboflavin content of fresh egg yolk to 3.3 micrograms per gram, but achieved no further increases in the riboflavin content of the egg white.

Addition of 900 micrograms of synthetic riboflavin to each 100 grams of feed increased the riboflavin content of fresh egg white from the basal level of 1.3 micrograms per gram to 3.9. Addition of 1,900 micrograms failed to raise the riboflavin content of either fresh egg white or fresh egg yolk above these levels. Maximum storage of riboflavin was attained in the egg

white in one week, in the egg yolk in two weeks. The depletion period lasted one week for the hens receiving the 900 microgram level, 3 weeks for the hens receiving the 1,900 microgram level.

The increase in the riboflavin content of the eggs over the basal level for both groups of hens in the latter experiment was approximately the same. The experimenters conclude that the difference in the maximum riboflavin content of the eggs of the two groups could be attributed to the difference in the riboflavin levels of the eggs when the hens were given the basal diets, and that the hens used in the second study had inherent ability to metabolize riboflavin more efficiently than the hens in the first study.

Feeding of Chickens

By H. W. TITUS, Bureau of Animal Industry.

In general, the cereal grains, and sometimes the grain sorghums, are used as the chief sources of energy. Flour-mill byproducts, such as bran and middlings, are of value because they supply bulk and their use tends to produce a loose-textured feed; furthermore, they are good sources of several of the vitamins and vitaminlike factors. Dried skim milk, dried buttermilk, fish meal, meat scrap, and meat-and-bone scrap are the most commonly used sources of animal protein; liquid skim milk is sometimes used, but it contains only about 3.5 per cent of protein.

Soybean meal, peanut meal, cottonseed meal, linseed meal, and corn-gluten meal are the concentrated sources of vegetable protein that are most frequently used. Alfalfa-leaf meal and alfalfa meal are usually good sources of vitamins A and G. The most commonly used mineral supplements are oystershell, ground limestone, steamed bonemeal and salt. The best sources of vitamin D are the fish-liver oils and other fish oils; but, of course, the cheapest source of vitamin D is sunshine.

Linseed meal, when used in small quantities, not more than 2 or 3 per cent of the total feed intake, is of value because it absorbs a fairly large quantity of water and thus produces a somewhat bulky, mucilaginous mass that aids in the passage of food residues through the intestines.

Green feeds have been highly prized and widely used by poultry keepers. They are generally good sources of vitamins A, B, E, and G and of protein of good quality. Modern research in poultry nutrition, however, has clearly shown that green feeds are not necessary, if the vitamins that they contain are supplied in other ways. When good, clean range is available as a source of fresh, green feed, it should be utilized to the fullest extent possible. However, it generally is not economical to use fresh, green feed that must be cut and taken to the chickens.

Cod-liver oil, alfalfa-leaf meal, alfalfa meal, and yellow corn may be used to supply the vitamin A; and dried skim milk, dried buttermilk, dried whey, and alfalfa products to supply the vitamin G. Vitamins B and E, as previously indicated, are supplied by seeds, grains, alfalfa products, middlings, and shorts.

If too much milk, bran, limestone, steamed bonemeal, or salt is included in the diet, there is a tendency for the droppings to be loose, and as a result a large percentage of the eggs may become soiled and therefore have a decreased market value. The addition of 2 or 3 per cent of linseed meal to the diet will frequently cause the droppings to be more firm; but when this does not produce the desired result, a reduction in the quantity of salt, steamed bonemeal, or bran may be necessary.

MIXING THE MASH.—All the ingredients of a mash should be thoroughly mixed to insure a uniform distribution of those that are present in relatively small quantities. It is best to weigh out first the more bulky ingredients and those that are used in greatest quantity, and then to add the other ingredients. It is a desirable practice to mix the salt and the other

**CHECK
YOUR
FORMULAS
with
Laboratory
Analyses**

**Protein, Fat, and Fibre
—Feed or Grain—
Analyzed at
Reasonable Rates
Runyon Testing Laboratories
1106 Board of Trade Chicago, Illinois
"Runyon Analyze Help Sell Feeds"**

**Triple XXX
Alfalfa
Meal**

Use more of it—it's healthful



**THE DENVER ALFALFA
MILLING & PRODUCTS CO.**

**Merchants Exchange
ST. LOUIS**

LAMAR, COLO.

Animal Nutrition

by L. A. Maynard

This book presents the principles of nutrition and their application in feeding practice.

Contains chapters on: The Vitamins; Feeding Experiments; Nutritional Balances; Lactation; Reproduction and on other subjects vital in the feeding of livestock.

Attractively bound in cloth, 483 pages, 20 illustrations, many charts and formulae. Weight 3 lbs., price \$4.00, plus postage.

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St. Chicago, Ill.



**Corn Gluten Feed, Corn Oil Cake Meal,
Brewers' Dried Grains Malt Sprouts
ANHEUSER-BUSCH ST. LOUIS**

mineral supplements with some of the bran or middlings before adding them to the other ingredients. All oils should be mixed thoroughly with a suitable portion of the bran or ground corn before they are added. If pulverized or very finely ground oats is an ingredient, it is preferable to mix the oil with a portion, because finely ground oats tend to prevent destruction of the vitamin A in the oil. Commercial mixed feeds are now widely used, and many of them are of excellent quality. If a ready-mixed mash is used, the method of feeding should be that recommended by the manufacturer.—Bull. 1841.

California Feed Regulations

By L. M. JEFFERS, Chief Buro of Field Crops, California Department of Agriculture.

We have been developing a new set of regulations and definitions, which will become effective July 1, 1940, under the changes made in 1939 by the Legislature in the Feeding Stuffs Act.

By regulation we are prohibiting the sale of feeds which contain harmful materials, such as metal. This will mean a greater use of magnetic separators.

After July 1 the ingredients of mixed feed must be listed in the decreasing order of the amounts present. Solely for the purpose of establishing a measuring stick to the weight of steam rolled barley, we have established a 12% moisture basis on which weight shortages will be calculated.

Feeding stuffs which have been damaged by fire, water or other causes must be so marked and cannot be incorporated into mixed feeds. Ground and rolled barley shall not contain more than 7% of crude fiber. These materials when showing from 7.1% to 9.0% of crude fiber, shall be designated as "Ground (or rolled) Light Barley." Ground barley showing from 9.1 to 11% of crude fiber, shall be designated as "Ground Barley with Ground Screenings." Material showing from 11.1 to 14% crude fiber shall be classed as "Ground Grain Screenings." And you all know that when you exceed 14% crude fiber the material shall be classed as "Ground Light Suctions." The material now called "Oat Mill Feed (oat hulls, oat shorts, and oat middlings)," will, after July 1, have a fiber limit of 30%.

In the very near future we will begin the testing of the vitamin oils which are being distributed in the state. This will not be an extensive activity; but we trust that the same will be effective and will preclude the establishing of California as a dumping ground for low-quality oil.

We are making intensive studies on fish and meat meals, with the expectation that at some future date we will be in a position to establish standards for these materials, which standards may include the items of protein quality, ammoniacal nitrogen, and free fatty acid. In 1939 we held 30 preliminary hearings, and there were five court cases.

Some of our feed manufacturers and distributors will have to concentrate on studying the requirements of the law and regulations and make strenuous effort to comply with the same, or 1940 will see the establishment of a new record.

Feedstuffs Movement in April

Receipts and shipments of millfeeds at the various markets during April, compared with April, 1939, in tons, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Boston	267	658	.....	20
Chicago	26,494,000	32,657,000	90,165,000	97,614,000
Kansas City	4,500	5,100	20,300	24,350
Milwaukee	460	250	13,520	8,080
Minneapolis	1,321	.....	33,025	.....
Peoria	10,120	13,620	20,420	13,920

*Millfeed

Ass'n Workers Active in Oregon

The seed com'te of the Oregon Feed Dealers Ass'n held a meeting at Salem, Ore., the evening of Apr. 25 to draw up a petition for exemption of the seed industry from the wages and hours law.

Willis Small was re-elected governor of the Eugene district. The dealers heard an address by E. M. Dickson, veterinarian of Oregon State College, on diseases of poultry.

Al Sholseth has been elected governor of the Salem district, to succeed Walter Barkus.

Juel Lensch has been elected governor of the Portland Retail District to succeed Werner Wilcke who resigned after the sale of his business.

Hens and Chicks Need Green Feed

Experimenting to find the effect of legume silage on chicks and laying hens, P. W. Allen, M. Jacob, N. O. Sjolander, J. A. McBee and I. H. Smiley, at the Tennessee experiment station, divided seven week old white leghorn cockerels into three groups.

One group was fed all the birds would eat of a basic ration and gained 173% in 8 weeks.

The second group received the same ration, plus all the red clover and alfalfa legume silage the birds would eat. This group gained 214% in the same period.

The third group received the same ration, plus all the buttermilk the cockerels would consume, and gained 215% in 8 weeks.

In the egg laying test, two groups of white leghorn pullets from the same flock, with the same egg laying record, were put on the same basic diet in December. The group fed legume silage in addition to the basic laying ration came into laying so much earlier than the check group that it laid 61% more eggs during January and February, months of high egg prices.

A three months' old, bright green, succulent silage was used.

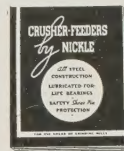
Farmers borrowed \$1,003,773,605 from the Farm Credit Administration since it was organized in 1933, to Apr. 1, 1940. Many of the 541,743 loans are being refinanced for a 20-year period.

The peak of loans by the C.C.C. on farmer owned corn of the 1939 crop made before the Apr. 15 time limit was 301,298,762 bus. By states loans were: Illinois, 84,888,429 bus.; Indiana, 6,596,687; Iowa, 144,200,605; Kansas, 1,172,549; Kentucky, 12,235; Michigan, 67,508; Minnesota, 37,525,101; Missouri, 4,813,846; Nebraska, 11,780,288; North Dakota, 78,271; Ohio, 1,434,960; South Dakota, 8,599,682; Wisconsin, 128,601.

Hay Movement in April

Receipts and shipments of hay at the various markets during April, compared with April, 1939, in tons, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Boston	770	319	.....	.....
Chicago	1,781	1,199	1,675	12
Kansas City	984	1,464	288	372



EAR CORN CRUSHERS

Bulletin 920 deals with the problem of feeding hammer and attrition mills. Send for your copy today—it's free.

• NICKLE ENGINEERING SAGINAW MICHIGAN

CHICKENS TURKEYS

Their Feed and Care

Helping your farmer patrons to increase their profits from their flocks will also increase your business. These authoritative books will aid you when advising them.

POULTRY PRODUCTION—Lippincott and Card
A book complete with information needed in the successful raising of poultry. Newly revised. 603 pages. 215 illustrations. Weight 4 lbs., price \$4.00 plus postage.

PRACTICAL POULTRY FARMING—Hurd
Revised and enlarged edition, up-to-date. Contains all important discoveries in poultry production made in recent years. 480 pages, 200 illustrations. Weight 2 lbs. Price \$2.50 plus postage.

POULTRY HUSBANDRY—Jull
Contains a background of the poultry industry, the fundamental principles involved in various poultry practices, and important economic factors in producing and marketing poultry products. 548 pages, 167 illustrations. Weight 3 lbs, price \$4.00 plus postage.

TURKEY MANAGEMENT—Marsden and Martin
Because of the recognized ability of the authors, this, the first complete, non-technical treatise on turkey production should prove of great value to both large and small producers. 708 pages, 17 chapters, appendix and thorough index, 120 illustrations. Weight 3 lbs, price \$3.50 plus postage.

Nothing is more productive of profit than healthy poultry. These books will aid you in encouraging your patrons to raise the better types. Order them today.

Grain & Feed Journals

Consolidated Chicago, Ill.
332 S. La Salle St.

WOOSTER BRAND SOYBEAN OIL MEAL

EXPELLER PROCESSED 41% IMPROVED QUALITY

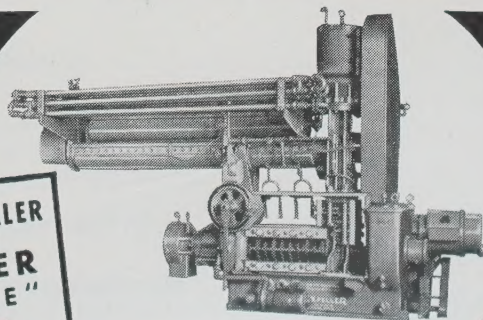
Try It—You Will Like It

TEL. 59

SOYA PROCESSING CO.

WOOSTER, OHIO

Only an EXPELLER
can make
EXPELLER
"NUT-LIKE"
Oil Meals



Expellers—the greatest value in pressing equipment—backed by 48 years experience in building continuous presses for pressing oleaginous seeds and nuts, and cracklings. Write for details.

THE V. D. ANDERSON CO.
1956 W. 96th St. • Cleveland, Ohio

Vitamin Requirements of Swine

By W. E. KRAUSS, of Ohio Agr. Exp. Sta.,
Before Amer. Soc. of Animal Production

From the time the term "vitamine" was first introduced by Funk (1912) to the present day represents a minute geologic period, but a gigantic era of nutritional advancement, particularly in the field of vitamin research. In 1905, after finding that the addition of milk to a diet of casein, albumin, rice flour, lard and a mixture of all the then known essential inorganic salts, made the difference between life and death in mice, an investigator in Holland wrote "... there is a still unknown substance in milk, which, even in very small quantities, is of paramount importance to nourishment." Should this writer, Pekelharing by name, be alive today and realize that one fraction alone of his unknown substance had been separated into at least nine different entities, he would feel much like the piscatorial creature his name simulates.

To attempt to review the progress of vitamin nutrition at this time would be superfluous, in view of the mass of good books, bulletins and review articles that are readily available. Rather, it would seem to be my function today to point out, first, new discoveries, and second, how these new findings may affect our present conceptions.

Early investigations on the vitamin requirements of swine were confined to the fat-soluble factors A and D, both of which have been shown to be essential to the point that under certain conditions special supplements containing them need to be used.

Of fundamental significance in this connection is the recent work of Johnson and Palmer at the University of Minnesota, which demonstrated that not only do pigs require vitamin D, but that there is considerable variation among breeds and even among pigs of the same breed in this requirement. It was also shown that the reduced plasma-calcium values resulting from a lack of this vitamin have a pronounced effect on growth and feed consumption, and that white pigs are less apt to become rachitic than colored pigs under similar conditions in the winter.

During the last two years attention has been directed to the role of water-soluble factors in pig nutrition, as a result of which striking new developments have occurred that demand special consideration. In 1937 Birch, Chick and Martin of England reported that pigs fed a modified Goldberger pellagra-producing diet developed scours which was corrected by the addition of yeast, and the following year showed that the active factor in yeast was nicotinic acid. Simultaneously, Hughes of California, was obtaining similar results which were reported in *Hilgardia* in 1938, at last year's meeting of this society, and in the June, 1939, issue of the *Journal of Nutrition*.

These studies showed that diets deficient in one or more of the factors of the B-complex resulted in anorexia, impaired locomotion and lowering of the body temperature and respiratory rate. The importance of nicotinic acid was emphasized, a need for riboflavin and thiamin was established and the essential nature of the factors contained in rice bran filtrate was indicated.

A recent personal communication from Dr. Hughes states that his most recent data indicate a minimum requirement of riboflavin for young growing pigs between 40 and 140 pounds in weight, of between 1 and 3 milligrams per hundredweight daily. Indications were also obtained that the pig is unable to synthesize thiamin and that the amount in the muscle of the pig is probably proportional to that received in the diet. Similar observations on the essential nature of riboflavin for pigs have been made by Bethke at the Ohio Experiment station.

Still further importance is attached to the role of nicotinic acid in the nutrition of swine by the studies of Davis and Freeman of Michigan, which showed that prevention of necrotic enter-

itis in swine is in a large measure a matter of nutrition and specifically one of including nicotinic acid in the ration.

That still other as yet unidentified nutritional factors affecting swine nutrition lurk behind the scenes is suggested by the work of Ellis and Madsen in which leg weakness due to myelin degeneration of the sciatic nerve and spinal cord was thought to be of nutritional origin.

Program of Oregon Feed Dealers

The Oregon Feed Dealers Ass'n will hold its annual meeting May 24 at the Multnomah Hotel, Portland, Ore.

The leading speaker will be Wayne Morse, dean of the law school of the University of Oregon, and who has gained fame as adjuster of labor troubles as the official Pacific Coast Waterfront Arbitrator. Others are:

H. E. Cosby, head of the poultry department, Oregon State College, and Dr. Frank Munk, former head of the economics department at the University of Prague.

Proving Ingredient Quality

Dr. J. E. Hunter, director of research for Allied Mills, Inc., manufacturers of Wayne and Amco Feeds, recently explained in detail to Allied Mills sales representatives the importance of "I-Q" (ingredient quality) in feeds and revealed the new "Triple Test System" of manufacturing that has been inaugurated by this company.

Dr. Hunter stated that these tests prove conclusively that two feeds of identical formula and general chemical analysis can produce far different results in the feed lot and poultry house. He explained that feeding science and research have proven that "feed is not feed" and that 100 lbs. of one feed is not necessarily equal to 100 lbs. of another feed having exactly the same formula and general chemical analysis.

"Not many years ago the feed customer was primarily interested in having the protein, fat and fiber specifications on the feed tag come within certain requirements," Dr. Hunter commented. "The buyer was not concerned with minerals, vitamins or ingredient quality. This picture has changed a great deal, however, and today the feed customer is vitally interested in vitamin content, ingredient quality, minerals and performance of the feed he buys."

In conclusion, Dr. Hunter stated, "No feed

can be any better than the quality of ingredients that go into its make-up regardless of formula or chemical analysis. That is the reason why Allied Mills has inaugurated the 'Triple Test System' and I-Q Seal of Quality. This progressive step in feed manufacturing serves as excellent protection for both the feed dealer and feed customer."



Check the Tag
On Every Bag

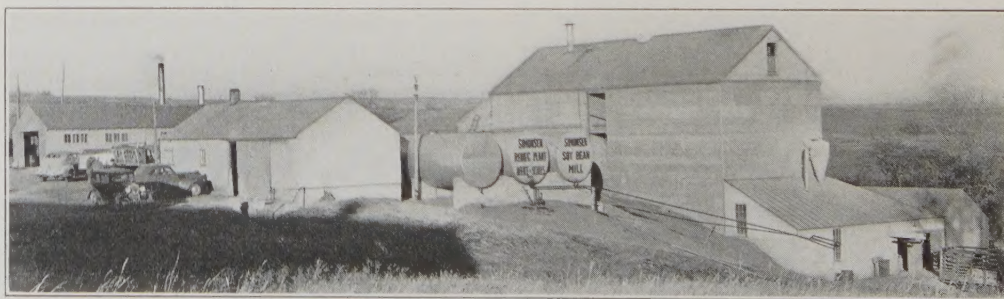
**This Tag
makes sales!**

— because it shows the
guarantee of carotene
content at time of manu-
facture. Because it is
dated for freshness. Ex-
clusive Fernando features.
Write for free samples
and literature.



**Fernando Valley
Milling & Supply Co.**
6104 Van Nuys Boulevard
Van Nuys, California

FIRST ONE UNIT SOYBEAN PLANT IN IOWA



SIMONSEN SOYBEAN MILL, QUIMBY, IOWA

NEWELL DESIGNED AND NEWELL BUILT

in its entirety is this busy, economically operated soybean processing plant at Quimby, Ia. The design provided for expansion. After a year of operation the owners had Newell install a second soybean expeller to double the plant's capacity and the next year a third expeller was installed as well as an additional one hundred thousand bushel storage.

NEWELL CONSTRUCTION & MACHINERY COMPANY

CEDAR RAPIDS, IOWA — Since 1899

Manufacturers, Contractors, Designers, Builders and Jobbers

Soybean Plants, Grain Elevators, Mills, Seed Houses, Hybrid Seed Corn Plants and Coal Pockets.

Full information upon request.

Carotene and Vitamin A

By O. A. LEONARD of Mississippi Experiment Station

The agricultural engineering department of the Mississippi Experiment Station has been experimenting for several years on finding better and more rapid methods of curing hay. The present study is associated with this work.

Carotene is a yellow pigment which is changed into vitamin A in the bodies of animals. It is necessary for the life and good health of all animals. If young animals do not have a sufficient quantity of vitamin A they grow slowly. Animals with insufficient vitamin A suffer from night blindness—that is, they do not see well at night and they may run into all kinds of obstacles. They may become weak and suffer from respiratory trouble and die. A sufficient quantity of this vitamin is necessary for the good production of milk, eggs and healthy offspring. Animals will become sterile unless a sufficient quantity of vitamin A is present. A previous article in Mississippi Farm Research by W. C. Cowser, Vol. 2, No. 2, page 3, has described the probable effects of vitamin A deficiency in some Mississippi cattle.

Carotene is one of the main yellow pigments in green plants, being especially abundant in the leaves. Carotene is stored as vitamin A in the livers of animals and is thus abundant in cod liver oil and similar products.

Alfalfa, sweet clover, soy beans and Johnson grass were studied as to distribution of carotene within the plant and the effect of various methods of drying on its content.

Leaves are high in carotene and the stem relatively low. The upper part of the stem is higher in carotene than is the lower part. In general, the carotene content varies with the green color; thus one can compare the relative carotene content by comparing the relative

greenness. Altho the leaves made up less than 50 per cent of the weight of the above plants, they contained about 90 per cent of the carotene. It is evident then that insofar as carotene is concerned, the leaves represent by far the most important part of the plant and the hay.

CAROTENE AFFECTED IN CURING—Carotene is affected remarkably by various factors and considerable destruction occurs in the curing process. Leaves left exposed to the sun lose their carotene more rapidly than those left in the shade. The mere process of drying the plants, even in absolute darkness, results in a considerable loss of carotene. The degree of destruction in the sun depends upon a number of factors, such as the light intensity, temperature, the number of plants or leaves which overlap, and the nature of the leaf. Plants grown under different conditions will lose a different proportion of their carotene content upon drying—the more succulent plants seeming to lose their carotene faster than those which are less succulent. Hay that has been wet by dew or rain is reduced thereby in carotene.

In one test Johnson grass was raked and shocked five hours after being cut and compared with unraked hay after standing two days in the field. The shocked hay (interior of shock) had 65 parts per million carotene, while the unraked hay had 16 p.p.m. and the hay on the surface of the shock 25 p.p.m. One can conclude from this test that the sun will lower the carotene content of hay wherever it is struck, but that shading, even by the outer layers of hay, reduces the destruction. Previous work by the agricultural engineering department of the Mississippi Experiment Station has shown that double windrowing alfalfa hay two hours after cutting results in more rapid drying than either single windrow or swath. It is evident that double windrowing would also result

in hay having a larger carotene content than by the other methods.

We have been conducting studies on the drying of hay by using a crusher and comparing with mowed hay as to carotene content. No significant difference has been found in the carotene content when left exposed to the sun for the same length of time. This is as one would expect, since crushing exerts most of its effect on the stems but not the leaves. Since the leaves may contain about 90 per cent of the carotene, a slight effect on the stems would not be noticeable in the analysis. However, since crushed hay can be baled and stored sooner than the uncrushed hay, more carotene will be present in it.

RAPID DRYING HELPFUL—The quantity of carotene in hay diminishes with time, the rate depending on the temperature and conditions of storage. Workers in other places have found the greatest loss occurs in the summer time, while the least loss occurs in winter. After one year of storage the hay may have lost most of its carotene and sometimes all of it. Thus it is important to not carry any more hay over from year to year than can be helped.

In our efforts to obtain hay and hay products with higher carotene content, artificially dried hay products have come into prominence. Such products contain an abundance of carotene. Grass silages also contain an abundance of carotene. A note of caution is necessary, however, when such materials are used, as indicated by work elsewhere. If the animals are confined without much sunlight, feeding such materials without a vitamin D supplement may result in rickets. The action of sunlight on hay causes vitamin D to be formed. Thus a certain amount of curing in the sun is desirable, even tho some carotene is destroyed, if other vitamin D sources are insufficient. Excessively weathered hay is low in both carotene and vitamin D.

INSURE WITH "THE MILL MUTUALS"

They Have Devoted Years of Study
to Your Insurance Problems

Millers National Insurance Company
CHICAGO, ILLINOIS

Michigan Millers Mutual Fire Insurance Co.
LANSING, MICHIGAN

Millers Mutual Fire Insurance Ass'n of Illinois
ALTON, ILLINOIS

Mill Owners Mutual Fire Insurance Company
DES MOINES, IOWA

Grain Dealers National Mutual Fire Insurance Co.
INDIANAPOLIS, IND.

Pennsylvania Millers Mutual Fire Insurance Co.
WILKES-BARRE, PA.

Millers Mutual Fire Insurance Company
HARRISBURG, PA.

Millers Mutual Fire Insurance Company of Texas
FORT WORTH, TEXAS

Western Millers Mutual Fire Insurance Company
KANSAS CITY, MO.

National Retailers Mutual Insurance Company
CHICAGO, ILLINOIS

For Fire Prevention Engineering Service on
Mills and Elevators

Address the

MILL MUTUAL FIRE PREVENTION BUREAU

400 West Madison Street

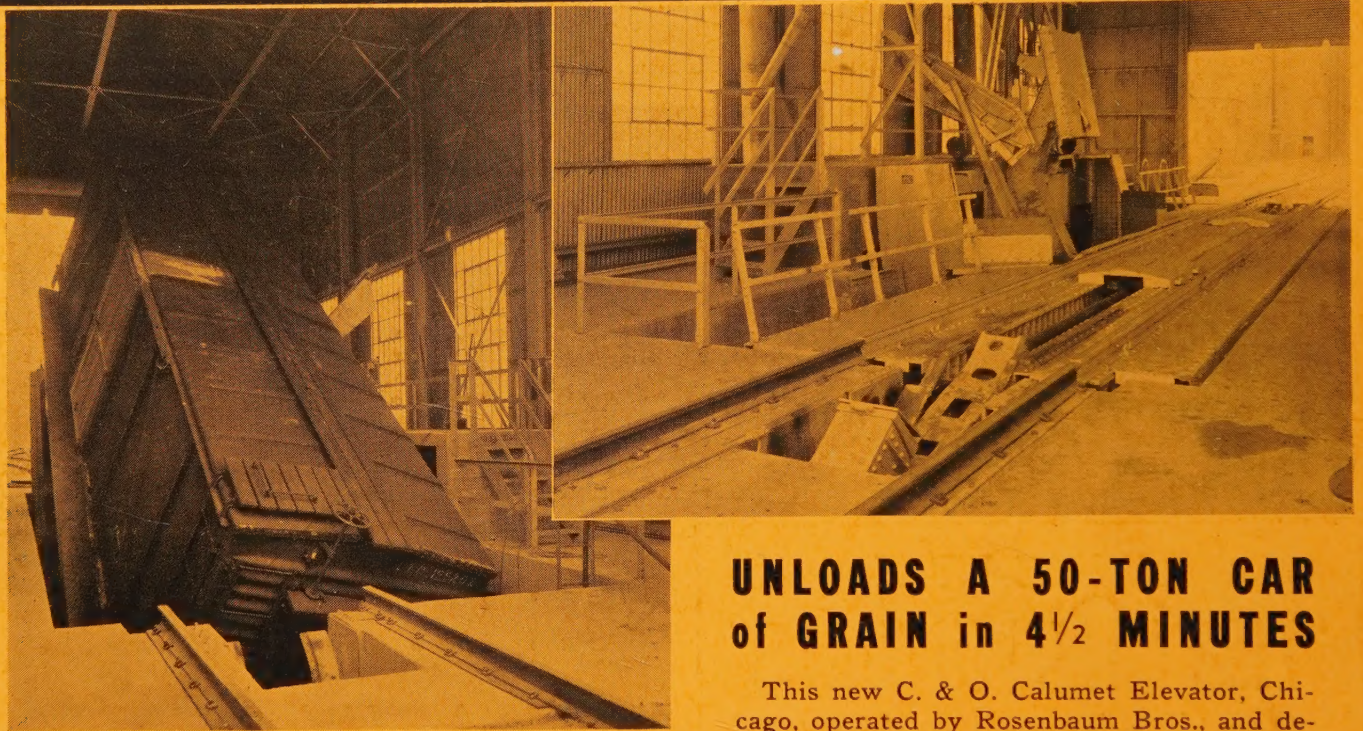
Chicago, Illinois

USE SOY-BEAN OILMEAL FROM FORD PLANTS IN YOUR LIVESTOCK AND POULTRY RATIONS

★ ★ ★ ★ ★

This soy-bean oilmeal is a by-product from the extraction of oil for use in manufacturing Ford cars. It is a high-quality feed ingredient and a very desirable source of protein for balanced, ready-mixed livestock and poultry rations. Quantities of this oilmeal are now available at favorable prices per ton. For further information, write to By-Products Sales Dept., Ford Motor Company, Dearborn, Michigan.

C. & O. Calumet Elevator Employs a **LINK-BELT** GRAIN CAR UNLOADER



UNLOADS A 50-TON CAR of GRAIN in 4½ MINUTES

This new C. & O. Calumet Elevator, Chicago, operated by Rosenbaum Bros., and designed and constructed by John S. Metcalf Co., is equipped with a Link-Belt automatic tilting type Grain Car Unloader which unloads a 50-ton car of grain in 4½ minutes.

✓ Check these Operating FEATURES

- 1 It handles all sizes and types of box cars with equal facility, and without damage.
- 2 Its unloading capacity is seven to eight cars per hour with two men.
- 3 Its operation is so simple and fool-proof that an ordinary laborer can operate it as successfully as a skilled mechanic.
- 4 It is equipped with an efficient grain door opener which removes the grain doors without damage.
- 5 The power requirements are reduced to a minimum by careful counter-balancing as evidenced by the small sizes of motors required. There are no penalizing peaks in the entire cycle of operation.
- 6 It has a receiving hopper with a capacity equal to that of the largest car.
- 7 Its initial, maintenance and operating costs are low.

Besides faster loading, this machine automatically removes the grain doors without destroying them and permits their use over and over again. Its many new and exclusive features, some of which are listed at left, make the Link-Belt Grain Car Unloader superior to anything of its kind for unloading small bulk materials from box cars.

Link-Belt's extensive experience in designing and building equipment for loading and unloading all kinds of materials, is at your service.

LINK-BELT COMPANY

Chicago, Philadelphia, Indianapolis, Atlanta, Dallas,
San Francisco, Toronto.

Offices and Warehouses in principal cities